Test Bank to Accompany

Foundations of Macroeconomics
Volume 1
Seventh Edition

by

Bade/Parkin

Pearson Education
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1.1 Definition and Questions

1) Scarcity exists because
   A) human wants exceed the resources available to satisfy them.
   B) some individuals have low income.
   C) the costs of production are high.
   D) some people make bad economic decisions.
   E) people take too much leisure time.

Answer: A

Topic: Scarcity
Skill: Level 1: Definition
Section: Checkpoint 1.1
Status: Old
AACS: Reflective thinking

2) Scarcity
   A) is the inability to satisfy all our wants.
   B) leads to higher prices.
   C) applies only to people living in poverty.
   D) is not something that affects very rich people.
   E) used to exist everywhere but has been eliminated in advanced economies.

Answer: A

Topic: Scarcity
Skill: Level 1: Definition
Section: Checkpoint 1.1
Status: Old
AACS: Reflective thinking

3) Scarcity requires that we
   A) produce efficiently.
   B) learn to limit our wants.
   C) have the most rapid economic growth possible.
   D) have unlimited resources.
   E) make choices about what goods and services to produce.

Answer: E

Topic: Scarcity
Skill: Level 1: Definition
Section: Checkpoint 1.1
Status: Old
AACS: Reflective thinking
4) Scarcity means that
   A) what we can produce with our resources is greater than our material wants.
   B) resources are unlimited.
   C) wants are greater than what we can produce with our resources.
   D) governments must make up for shortages in resources.
   E) choices made in self-interest cannot be the same as those made in the social interest.
Answer: C

5) Because human wants are insatiable and unlimited while available resources are limited, people are said to face the problem of
   A) scarcity.
   B) why to produce.
   C) macroeconomics.
   D) microeconomics.
   E) social interest versus self-interest.
Answer: A

6) Which of the following statements best describes the study of economics? Economics studies how
   A) to organize production so that scarcity does not occur.
   B) firms make profits.
   C) we make choices in the face of scarcity.
   D) to create incentives so that scarcity does not exist.
   E) businesses reach decisions.
Answer: C
7) Scarcity forces people to
   A) choose among available alternatives.
   B) cheat and steal.
   C) be unwilling to help others.
   D) live at a low standard of living.
   E) consume as much as they can as quickly as they can.

Answer: A

Topic: Scarcity
Skill: Level 2: Using definitions
Section: Checkpoint 1.1
Status: Old
AACSB: Reflective thinking

8) Scarcity means we must
   A) consume less.
   B) produce less.
   C) make choices.
   D) earn more.
   E) work more.

Answer: C

Topic: Scarcity
Skill: Level 1: Definition
Section: Checkpoint 1.1
Status: Old
AACSB: Reflective thinking

9) What is the reason that all economic issues and problems occur?
   A) All nations use some form of money to buy and sell goods and services.
   B) Humans are always wasteful and inefficient in production and consumption.
   C) Powerful governments are able to control production and consumption.
   D) Human wants exceed the resources available to satisfy them.
   E) People seek only their own self-interest.

Answer: D

Topic: Scarcity
Skill: Level 2: Using definitions
Section: Checkpoint 1.1
Status: Old
AACSB: Reflective thinking

10) The study of economics is best described as a study of
    A) the factors that influence the stock and bond markets.
    B) capitalism.
    C) the choices made in producing goods and services.
    D) coping with scarcity, and choices made as a result of scarcity in a society.
    E) how people earn a living.

Answer: D

Topic: Definition of economics
Skill: Level 1: Definition
Section: Checkpoint 1.1
Status: Old
AACSB: Reflective thinking
11) Which of the following statements best describes the study of economics? Economics studies how
   A) to organize production so that scarcity does not occur.
   B) firms make profits.
   C) we make choices in the face of scarcity.
   D) to create incentives so that scarcity does not exist.
   E) businesses reach decisions.

   Answer: C

12) Which of the following best defines economics?
   A) Economics teaches how to limit our wants.
   B) Economics studies how to choose the best alternative when coping with scarcity.
   C) Economics helps you earn as much money as possible.
   D) Economics analyzes all aspects of human behavior in general.
   E) Economics is concerned with prices and quantities of goods and services, both at the individual level and at the industry level.

   Answer: B

13) Economics is the social science that studies
   A) the real reasons people buy goods and services.
   B) the psychology of individuals and businesses.
   C) whether a nation has enough natural resources.
   D) how people make choices to cope with scarcity.
   E) how choices made in the social interest could eliminate scarcity.

   Answer: D
14) Economics is best defined as the social science that studies
   A) how a person can get everything he or she wants.
   B) the reason money exists.
   C) the way to eliminate choices in our decisions.
   D) the choices that societies, and the people and institutions that make up societies, make in dealing with the issue of scarcity.
   E) how choices made in the social interest must conflict with choices made in the self-interest.

Answer: D

Topic: Definition of economics
Skill: Level 1: Definition
Section: Checkpoint 1.1
Status: Old
AACSB: Reflective thinking

15) Microeconomics includes the study of the
   A) aggregate effects on the national economy.
   B) recessions and inflation in the global economy.
   C) choices made by individuals and businesses.
   D) reasons why the government changes interest rates.
   E) nationwide unemployment rate.

Answer: C

Topic: Microeconomics
Skill: Level 1: Definition
Section: Checkpoint 1.1
Status: Old
AACSB: Reflective thinking

16) The primary focus of microeconomics is
   A) to examine the operation of the entire (aggregate) economy.
   B) to examine the behavior and operation of the individual units or sectors that make up the economy.
   C) our government’s monetary policy.
   D) the levels of employment and inflation.
   E) to study how we managed to eliminate scarcity.

Answer: B

Topic: Microeconomics
Skill: Level 1: Definition
Section: Checkpoint 1.1
Status: Old
AACSB: Reflective thinking
17) Which of the following is a microeconomic issue?
   A) The price of gasoline increases in the United States this year.
   B) The Brazilian economy experiences rapid economic growth.
   C) The unemployment rate soars in Spain.
   D) Inflation skyrockets in Russia.
   E) The U.S. government cuts taxes to combat a recession.

Answer: A

18) Which of the following is a microeconomic issue?
   A) Growth in the U.S. economy slowed.
   B) Increased federal government expenditures have lowered the unemployment rate.
   C) The inflation rate fell this year.
   D) The quantity of wheat grown in the United States increases this year.
   E) The U.S. government cuts taxes to combat a recession.

Answer: D

19) Which of the following is a microeconomic topic?
   i. K-Mart's decision to close stores that are not making a profit
   ii. Home Depot's choice to hire more full-time employees because its sales increased
   iii. Delta Airlines changes its fares.

   A) i only
   B) ii only
   C) i and iii
   D) ii and iii
   E) i, ii, and iii

Answer: E
20) Which of the following is a microeconomic topic?
A) Northwest Airlines analyzes the benefits of adding one more flight to Salt Lake City.
B) Unemployment soars as taxes increase.
C) The government leaves interest rates unchanged as the economy improves.
D) Germany’s government increases taxes to avoid a budget deficit.
E) Chinese economic growth slows.
Answer: A

Topic: Microeconomics
Skill: Level 2: Using definitions
Section: Checkpoint 1.1
Status: Old
AACSB: Reflective thinking

21) Which of the following is a microeconomic topic?
i. Gas prices increase after a hurricane hits the gulf coast.
ii. Xavier starts a new business designing web pages.
iii. Abby decides to practice an extra hour of soccer instead of studying.
   A) i, ii and iii
   B) i only
   C) ii and iii
   D) ii only
   E) i and ii
Answer: A

Topic: Microeconomics
Skill: Level 2: Using definitions
Section: Checkpoint 1.1
Status: Old
AACSB: Reflective thinking

22) Macroeconomics is the study of
A) the actions of individual consumers.
B) national or global economies.
C) the actions of individual businesses.
D) the government.
E) how ceteris paribus affects causation.
Answer: B

Topic: Macroeconomics
Skill: Level 1: Definition
Section: Checkpoint 1.1
Status: Old
AACSB: Reflective thinking
23) Which of the following BEST describes macroeconomics?
   A) It analyzes the aggregate effects on the national economy of the choices made by individuals, firms, and governments.
   B) It studies the choices that individuals and businesses make when coping with scarcity.
   C) It examines how the choices that individuals affect governments.
   D) It is not a social science because its predictions cannot be tested.
   E) Proving causation is never a problem for macroeconomics.

Answer: A
Topic: Macroeconomics
Skill: Level 1: Definition
Section: Checkpoint 1.1
Status: Old
AACSBS: Reflective thinking

24) Which of the following is a topic studied in macroeconomics?
   A) the pricing decisions in the computer hardware industry
   B) the effect on economic growth if the government raises taxes
   C) how the wheat industry determines how much wheat to grow
   D) the impact of labor unions on wages
   E) the impact of higher prices for gasoline on the number of SUVs people buy

Answer: B
Topic: Macroeconomics
Skill: Level 2: Using definitions
Section: Checkpoint 1.1
Status: Old
AACSBS: Reflective thinking

25) Which of the following is a macroeconomic topic?
   A) The federal government's decision to spend more on environmental protection
   B) The county government's decision to increase the sales tax for your county
   C) Why did production and jobs expand slowly in 2011?
   D) General Motors decides what prices to set for their new models.
   E) The effect of floods in agricultural areas on the price and quantity of wheat

Answer: C
Topic: Macroeconomics
Skill: Level 2: Using definitions
Section: Checkpoint 1.1
Status: Revised
AACSBS: Reflective thinking
26) Which of the following is a macroeconomic issue?
   A) The price of a ticket to Walt Disney World in Orlando is increased.
   B) The National Football League signs a new television contract.
   C) The number of jobs and production in Zimbabwe increase.
   D) The Iowa corn harvest is smaller than normal.
   E) Utilities are required to install more anti-pollution devices.
   
   Answer: C

   Topic: Macroeconomics
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.1
   Status: Old
   AACSB: Reflective thinking

27) Which of the following is a macroeconomic topic?
   i. China increases interest rates to slow its economic growth.
   ii. Congress lowers tax rates to try and lower the unemployment rate.
   iii. Nissan decides to produce more electric Leaf models and fewer Altima sedans.
   
   A) i and ii
   B) i, ii and iii
   C) iii only
   D) i and iii
   E) ii and iii
   
   Answer: A

   Topic: Macroeconomics
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.1
   Status: Old
   AACSB: Reflective thinking

28) When you make the decision to spend your time attending class, which economic question are you answering?
   A) What?
   B) How?
   C) For whom?
   D) Why?
   E) Is this in the social interest?
   
   Answer: A

   Topic: Economic questions, what
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.1
   Status: Old
   AACSB: Reflective thinking
29) Of the three major economic questions, which of the following is the best example of a "What?" question?
   A) Should automobiles be produced using workers or robots?
   B) Should higher-income or lower-income people buy SUVs?
   C) Should we make faster microprocessors or pest-resistant corn?
   D) Should migrant workers or domestic workers be used to pick grapes?
   E) What should doctors be paid?

   Answer: C

   Topic: Economic questions, what
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.1
   Status: Old
   AACSB: Reflective thinking

30) When Ford decides to increase production of hybrid cars, it directly answers the _______ question.
   A) what
   B) how
   C) for whom
   D) where
   E) why

   Answer: A

   Topic: Economic questions, what
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.1
   Status: Old
   AACSB: Reflective thinking

31) When Delta decides to quit flying to Lithuania, it directly answers the _______ question.
   A) what
   B) why
   C) for whom
   D) how
   E) when

   Answer: A

   Topic: Economic questions, what
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.1
   Status: Old
   AACSB: Reflective thinking
32) The question of "What goods and services get produced?" most closely relates to which of the following issues?
   A) the distribution of goods and services in the economy
   B) producing goods and services in the least costly manner
   C) building a missile defense system, or putting a computer in every elementary school classroom
   D) obtaining specialized training to increase one’s income
   E) taxing high income workers to give payments to poor households

   Answer: C
   Topic: Economic questions, what
   Skill: Level 3: Using models
   Section: Checkpoint 1.1
   Status: Old
   AACS: Reflective thinking

33) When a home builder decides to computerize all of its production schedules, it directly answers the ______ question.
   A) for whom
   B) what
   C) where
   D) how
   E) why

   Answer: D
   Topic: Economic questions, how
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.1
   Status: Old
   AACS: Reflective thinking

34) When Fresh Express Salads decides to mechanically pick all of its lettuce, it directly answers the ______ question.
   A) what
   B) how
   C) for whom
   D) where
   E) when

   Answer: B
   Topic: Economic questions, how
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.1
   Status: Old
   AACS: Reflective thinking
35) When the power company decides to use manpower to bury its lines, it directly answers the _______ question.
   A) what  
   B) for whom 
   C) how  
   D) why  
   E) when 
Answer: C  
Topic: Economic questions, how  
Skill: Level 2: Using definitions  
Section: Checkpoint 1.1  
Status: Old  
AACSBS: Reflective thinking

36) The question of "How are goods and services produced?" most closely addresses which of the following issues?
   A) Should Ford build SUVs or luxury cars?  
   B) Should Ford use expensive industrial robots or inexpensive Mexican autoworkers to produce SUVs?  
   C) Should contractors build residential housing or shopping malls?  
   D) Is income distributed fairly in the United States?  
   E) Why are Christmas trees popular only in December? 
Answer: B  
Topic: Economic questions, how  
Skill: Level 2: Using definitions  
Section: Checkpoint 1.1  
Status: Revised  
AACSBS: Reflective thinking

37) Of the three major economic questions, which of the following is the best example of a "How?" question?
   A) Should we produce more heavy fleece coats?  
   B) Should we collect tolls on turnpikes using human toll collectors or mechanized toll machines?  
   C) Should we build log homes or build factories from bricks?  
   D) Should we spend more on health care?  
   E) Should we eat more oatmeal?  
Answer: B  
Topic: Economic questions, how  
Skill: Level 2: Using definitions  
Section: Checkpoint 1.1  
Status: Old  
AACSBS: Reflective thinking
38) Which economic question depends on the incomes that people earn and the prices they pay for goods and services?
   A) What?
   B) How?
   C) For whom?
   D) Why?
   E) Where?
   Answer: C

39) When the federal government decides to pay senators more than it pays soldiers, it answers the ________ question.
   A) why
   B) how
   C) for whom
   D) what
   E) where
   Answer: C

40) When a third string NFL quarterback earns more than a police officer, society answers the ________ question.
   A) for whom
   B) what
   C) how
   D) why
   E) social interest vs. self-interest
   Answer: A
41) When unskilled teens earn less than college graduates, society answers the _______ question.
   A) how  
   B) what  
   C) for whom  
   D) why  
   E) social interest versus self–interest  
   Answer: C  
   Topic: Economic questions, for whom  
   Skill: Level 2: Using definitions  
   Section: Checkpoint 1.1  
   Status: Old  
   AACSB: Reflective thinking  

42) Canada has nationalized health care, so that everyone, regardless of their ability to pay, has some access to health care. Based on this observation, Canada has decided that “everyone, regardless of their ability to pay” is the answer to what microeconomic question?
   A) What type of health care will be produced and in what quantity?  
   B) How will health care be produced?  
   C) For whom will health care be produced?  
   D) Why will we offer health care?  
   E) Must we offer health care?  
   Answer: C  
   Topic: Economic questions, for whom  
   Skill: Level 3: Using models  
   Section: Checkpoint 1.1  
   Status: Old  
   AACSB: Analytical thinking  

43) Choices that are best for the individuals that make them are choices in pursuit of
   A) the social interest.  
   B) efficiency.  
   C) incentives.  
   D) self–interest.  
   E) equity.  
   Answer: D  
   Topic: Self interest  
   Skill: Level 1: Definition  
   Section: Checkpoint 1.1  
   Status: Old  
   AACSB: Reflective thinking
44) Self interest
   A) reflects choices that are best for society as a whole.
   B) reflects choices that are best for the individual who makes them.
   C) has nothing to do with determining what goods are produced.
   D) occurs only when wants exceed available resources.
   E) cannot be used to determine how goods are produced.

Answer: B

Topic: Self interest
Skill: Level 1: Definition
Section: Checkpoint 1.1
Status: Old
AACS B: Reflective thinking

45) Choices that are best for the society as a whole are choices in pursuit of
   A) answering the "how" question.
   B) the social interest.
   C) self-interest.
   D) incentives.
   E) answering the "for whom" question.

Answer: B

Topic: Social interest
Skill: Level 1: Definition
Section: Checkpoint 1.1
Status: Old
AACS B: Reflective thinking

46) The characteristic from which all economic problems arise is
   A) political decisions.
   B) providing a minimal standard of living for every person.
   C) how to make a profit.
   D) hunger.
   E) scarcity.

Answer: E

Topic: Scarcity
Skill: Level 2: Using definitions
Section: Checkpoint 1.1
Status: Old
AACS B: Reflective thinking

47) All economic questions and problems arise from
   A) the fact that society has more than it needs.
   B) turmoil in the stock market.
   C) the unequal distribution of income.
   D) a society’s wants exceeding what its scarce resources can produce.
   E) the difference between self-interest and social interest.

Answer: D

Topic: Scarcity
Skill: Level 1: Definition
Section: Checkpoint 1.1
Status: Old
AACS B: Reflective thinking
48) Scarcity results from the fact that  
   A) people's wants exceed the resources available to satisfy them.  
   B) not all goals are desirable.  
   C) we cannot answer the major economic questions.  
   D) choices made in self-interest are not always in the social interest.  
   E) the population keeps growing.  
   Answer: A  
   Topic: Scarcity  
   Skill: Level 1: Definition  
   Section: Checkpoint 1.1  
   Status: Revised  
   AACSB: Reflective thinking  

49) To economists, scarcity means that  
   A) limited wants cannot be satisfied by the unlimited resources.  
   B) a person looking for work is not able to find work.  
   C) the number of people without jobs rises when economic times are bad.  
   D) there can never be answers to the what, how or for whom questions.  
   E) unlimited wants cannot be satisfied by the limited resources.  
   Answer: E  
   Topic: Scarcity  
   Skill: Level 1: Definition  
   Section: Checkpoint 1.1  
   Status: Old  
   AACSB: Reflective thinking  

50) Which of the following statements is true regarding scarcity?  
   A) Scarcity affects poorer countries only.  
   B) An economy experiences scarcity only when the incomes of its citizens decline.  
   C) Poor people experience scarcity more often than do rich people.  
   D) All citizens in a wealthy economy experience scarcity.  
   E) Scarcity could be overcome if people would make all choices in the social interest.  
   Answer: D  
   Topic: Scarcity  
   Skill: Level 2: Using definitions  
   Section: Checkpoint 1.1  
   Status: Old  
   AACSB: Reflective thinking  

51) People must make choices because  
   A) most people enjoy shopping.  
   B) of scarcity.  
   C) there are many goods available.  
   D) the question "What goods and services are produced?" is not adequately answered.  
   E) making choices is in the social interest.  
   Answer: B  
   Topic: Scarcity  
   Skill: Level 2: Using definitions  
   Section: Checkpoint 1.1  
   Status: Old  
   AACSB: Reflective thinking
52) Which of the following is a microeconomic issue?
   A) Why has unemployment risen nationwide?
   B) Why has economic growth been rapid in China?
   C) What is the impact on the quantity of Pepsi purchased if consumers' tastes change in favor of non-carbonated drinks?
   D) Why is the average income lower in Africa than in Latin America?
   E) Why did overall production increase within the United States last year?
   Answer: C

53) Microeconomics includes the study of
   A) how countries decide to fund their budget deficits.
   B) the choices that individuals and businesses make.
   C) how a nation promotes economic growth.
   D) the effect on the national economy of the choices that individuals make.
   E) the overall amount of production within the economy.
   Answer: B

54) The question “Should we produce LCD televisions or computer monitors?” is an example of a ________ question.
   A) what
   B) how
   C) for whom
   D) where
   E) why
   Answer: A
55) When Ferrari decides to produce 1,200 360 Modenas each year, Ferrari is answering the _____ question.
   A) for whom  
   B) how  
   C) what  
   D) why  
   E) scarcity

   Answer: C

   Topic: Economic questions, what
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.1
   Status: Old
   AACSB: Reflective thinking

56) Whether a company produces fishing rods mostly by hand or using high-tech machinery is a question of
   A) "For whom will goods be produced?"
   B) "When will the goods be produced?"
   C) "Where will the goods be produced?"
   D) "How will the goods be produced?"
   E) "Why will the goods be produced?"

   Answer: D

   Topic: Economic questions, how
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.1
   Status: Old
   AACSB: Reflective thinking

57) When a landscaping company decides to use drafting software and computers instead of hiring designers to draw design plans by hand, it is answering the _______ question.
   A) how  
   B) what  
   C) for whom  
   D) opportunity cost  
   E) why

   Answer: A

   Topic: Economic questions, how
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.1
   Status: Old
   AACSB: Reflective thinking
58) The question "Should we produce houses using bricks or wood?" is an example of a _______ question.
   A) what  
   B) how  
   C) for whom  
   D) where  
   E) why  
Answer: B  
Topic: Economic questions, how  
Skill: Level 2: Using definitions  
Section: Checkpoint 1.1  
Status: Old  
AACS: Reflective thinking

59) The question "Should economics majors or sociology majors earn more after they graduate?" is an example of a _______ question.
   A) what  
   B) how  
   C) for whom  
   D) where  
   E) why  
Answer: C  
Topic: Economic questions, for whom  
Skill: Level 2: Using definitions  
Section: Checkpoint 1.1  
Status: Old  
AACS: Reflective thinking

60) If a decision is made and it is the best choice for society, the decision is said to be
   A) a valid economic choice.  
   B) made in self-interest.  
   C) made in social interest.  
   D) consistent with scarcity.  
   E) a want-maximizing choice.  
Answer: C  
Topic: Social interest  
Skill: Level 2: Using definitions  
Section: Checkpoint 1.1  
Status: Old  
AACS: Reflective thinking
1.2 The Economic Way of Thinking

1) Rational choice
   A) is a choice that uses the available resources to best achieve the objective of the person making the choice.
   B) is always efficient.
   C) is what you must give up to get what you want.
   D) is made by comparing different incentives.
   E) provides the answer to only the "how" question.

Answer: A
Topic: Rational choice
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking

2) A rational choice is one that
   A) always turns out for the best for the decision maker.
   B) creates no costs for the decision maker.
   C) must be made with perfect information.
   D) uses the available resources to most effectively satisfy the wants of the person making the choice.
   E) is made in the social interest rather than the self-interest.

Answer: D
Topic: Rational choice
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking

3) What is NOT true about rational choice?
   A) It can result in different decisions for different individuals.
   B) It involves comparing costs and benefits.
   C) It might turn out not to have been the best choice after the event.
   D) It is a choice that uses the available resources to best achieve the objective of the person making the choice.
   E) It is the same for all individuals.

Answer: E
Topic: Rational choice
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking
4) In economics, cost is measured as ________, and benefit is measured as ________.
   A) what you must give up to get something; what you are willing to give up to get it
   B) what you are willing to give up to get it; what you must give up to get something
   C) the amount of money that you pay for something; the amount of money that someone else is willing to pay you
   D) what you are willing to pay on the margin; what the government pays you when you are unemployed or retired
   E) the amount of money that you pay on the margin; the amount of money that you receive on the margin

Answer: A

Topic: Benefits and costs
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACSBS: Reflective thinking

5) An opportunity cost is
   A) the dollar amount that is paid.
   B) anything the decision maker believes costs to be.
   C) the benefits of the highest–valued alternative forgone.
   D) whatever is paid out and cannot be reduced or reversed.
   E) another term for all the sunk costs.

Answer: C

Topic: Opportunity cost
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACSBS: Reflective thinking

6) Economists measure opportunity cost
   A) only when it is on the margin.
   B) as the best thing given up.
   C) as the sum of all forgone opportunities.
   D) as the same as marginal benefit.
   E) as equal to the sum of all the sunk costs.

Answer: B

Topic: Opportunity cost
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACSBS: Reflective thinking
7) The opportunity cost of a decision is measured in terms of
   A) time.
   B) the price of the alternative we choose.
   C) the next best thing given up.
   D) the price of a new opportunity that arises.
   E) sunk cost.
Answer: C

8) You have chosen to take a trip during spring break. If you had not gone, you would either have worked at a temporary job or studied for exams. The opportunity cost of your trip is
   A) the wages you would have earned from working.
   B) the lower grade earned by not studying.
   C) the wages you would have earned from working and the lower grade earned by not studying.
   D) the value of the trip.
   E) We cannot determine what the opportunity cost is without knowing which alternative, working or studying, you would have preferred.
Answer: E

9) If Jessie studies economics for two hours instead of going to the movies with her friends, then
   A) the benefit of studying is the missed movie.
   B) the opportunity cost of studying is the missed movie.
   C) Jesse definitely is making a rational choice.
   D) Jessie is ignoring a sunk cost.
   E) Jessie is not responding to any incentives.
Answer: B
10) The value of the best thing that a person must give up when making a decision is known as the ________ cost.
   A) direct
   B) benefit
   C) opportunity
   D) explicit
   E) sunk
   Answer: C
   Topic: Opportunity cost
   Skill: Level 1: Definition
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Reflective thinking

11) Ali decides to attend the one-hour review session for microeconomics instead of working at his job. His job pays him $10 per hour. Ali’s opportunity cost of attending the review session is
   A) the $10 he could have earned at his job.
   B) the value of the session minus the $10 he could have earned at his job.
   C) nothing, because the review session does not cost anything.
   D) equal to the benefit he gets from the review session.
   E) the one-hour review session.
   Answer: A
   Topic: Opportunity cost
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Analytical thinking

12) Suppose that, instead of taking this test, you could either have worked and earned income or partied and had a pleasurable time. Your opportunity cost of taking the test is the
   A) forgone work.
   B) forgone party.
   C) forgone working and partying.
   D) forgone working or partying, depending on which was your next best choice.
   E) test because you are taking it.
   Answer: D
   Topic: Opportunity cost
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Reflective thinking
13) The benefit from a good or service that you purchase is measured by
   A) the dollar amount that is paid for the good or service.
   B) the dollar amount you can get by selling the good or service.
   C) what you are willing to give up to obtain the good or service.
   D) how strong the incentives were that lead to buying the good or service.
   E) None of the above answers is correct because there is no way to measure the benefit you receive from purchasing a good or service.

   Answer: C

   Topic: Benefit
   Skill: Level 1: Definition
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Reflective thinking

14) Suppose you take a trip during spring break. To determine the benefit of taking the trip, you
   A) calculate the opportunity cost of the trip.
   B) measure what you are willing to give up to take the trip.
   C) determine the sunk cost of taking the trip.
   D) calculate the value of the next best alternative foregone.
   E) must measure what the trip is worth to you and then subtract the cost of the trip.

   Answer: B

   Topic: Benefit
   Skill: Level 1: Definition
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Reflective thinking

15) The cost of a one-unit increase in an activity is called the
   A) opportunity benefit.
   B) rational cost.
   C) marginal cost.
   D) marginal benefit.
   E) margin.

   Answer: C

   Topic: Marginal cost
   Skill: Level 1: Definition
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Reflective thinking
16) The opportunity cost of a one-unit increase in an activity
   A) is greater than the marginal benefit.
   B) is called rational cost.
   C) decreases as you do more of it.
   D) is called marginal cost.
   E) is measured by what the person is willing to give up to get one more unit of the activity.

   Answer: D
   Topic: Marginal cost
   Skill: Level 1: Definition
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Reflective thinking

17) Mothers Against Drunk Drivers (MADD) campaigned to increase the legal penalties of drunk
    driving. This successful campaign _______ of drunk driving.
    A) increased the marginal benefit
    B) decreased the marginal benefit
    C) increased the marginal cost
    D) decreased the marginal cost
    E) had no effect on the marginal cost or marginal benefit but did affect the total benefit

   Answer: C
   Topic: Marginal cost
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Reflective thinking

18) The marginal cost of an activity _______ as you do more of it.
    A) increases
    B) decreases
    C) doesn't change
    D) changes only if the marginal benefit of the activity does not change
    E) changes only if the marginal benefit of the activity changes

   Answer: A
   Topic: Marginal cost
   Skill: Level 1: Definition
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Reflective thinking
19) A professor changes the penalty for cheating on exams from getting a 0 on the exam to getting an F in the course. The professor has
   A) increased the marginal cost of cheating.
   B) decreased the marginal benefit of cheating.
   C) made all the students act in the social interest.
   D) recognized that students don’t respond to incentives.
   E) recognized that students don’t make rational choices.

Answer: A

Topic: Marginal cost
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking

20) The benefit of a one-unit increase in an activity
   A) is called marginal cost.
   B) is always greater than the opportunity cost of that activity.
   C) decreases as you do more of it.
   D) is measured by what you must give up.
   E) is called rational-choice benefit.

Answer: C

Topic: Marginal benefit
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking

21) Huey has eaten two hamburgers and is considering a third. The marginal benefit in his decision is the pleasure from consuming
   A) the two previous hamburgers.
   B) all three hamburgers.
   C) just the third hamburger.
   D) just the second hamburger.
   E) the third hamburger minus the pleasure from consuming zero hamburgers.

Answer: C

Topic: Marginal benefit
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSB: Analytical thinking
22) What typically happens to benefits as the amount of an activity is increased?
   A) Total benefits remain constant.
   B) Marginal benefit increases.
   C) Marginal benefit remains constant.
   D) Marginal benefit decreases.
   E) The marginal benefit changes only if the marginal cost changes.

Answer: D

Topic: Marginal benefit
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking

23) Suppose you eat two hamburgers for lunch. The marginal benefit of the first burger is ________ of the second burger.
   A) larger than the marginal benefit
   B) smaller than the marginal benefit
   C) equal to the marginal benefit
   D) not related to the marginal benefit
   E) equal to the marginal cost and the marginal benefit

Answer: A

Topic: Marginal benefit
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSB: Analytical thinking

24) A choice made by comparing all relevant alternatives systematically and incrementally is
   A) an opportunity cost.
   B) a choice on the margin.
   C) a benefit.
   D) a sunk cost.
   E) a choice made in the social interest.

Answer: B

Topic: On the margin
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking
25) Making choices on the margin means
   A) scribbling on the edges of your notebook paper.
   B) comparing all relevant alternatives systematically and incrementally.
   C) making a decision based on emotions.
   D) making decisions in the largest possible increments.
   E) taking account of all marginal benefits, all opportunity costs, and all sunk costs.
   Answer: B

26) Decision making on the margin involves
   A) comparing the marginal cost and marginal benefits when making a decision.
   B) comparing the total cost and the total benefit when making a decision.
   C) eliminating the additional cost when making a decision.
   D) determining the total benefits of a decision.
   E) comparing the benefits from the social interest to the benefits from the person's self-interest.
   Answer: A

27) In making your decision whether to take a trip during spring break, you compare all the other activities you could undertake. As a result, you
   A) are making a choice on the margin.
   B) limit the cost and the benefits you can gain.
   C) are not making a rational choice.
   D) do not face an opportunity cost.
   E) must have made a choice in the social interest.
   Answer: A
28) To make a rational choice, a person
   A) compares the extra benefits of one more unit to the extra costs of one more unit.
   B) adds the total benefits and the total costs and then compares the two totals.
   C) adds the total benefits to determine if the total is large enough.
   D) adds the total costs to determine if the total is small enough.
   E) takes account of all benefits and all opportunity costs, including both marginal costs and sunk costs.

Answer: A

Topic: Making rational choices
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACS: Reflective thinking

29) In order to determine whether to major in economics, a rational individual compares the ________ of the decision.
   A) marginal benefit and marginal cost
   B) opportunity cost and the sunk cost
   C) positive benefits and normative costs
   D) normative benefits and positive costs
   E) self-interest and social-interest

Answer: A

Topic: Making rational choices
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACS: Reflective thinking

30) In order to make a rational choice, people must
   A) only know what they want.
   B) be able to afford the choice decided upon.
   C) decide quickly without wasting time.
   D) compare marginal costs and marginal benefits.
   E) determine what is in the social interest.

Answer: D

Topic: Making rational choices
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACS: Reflective thinking
31) Instead of studying for an additional two hours for the economics final, Leann decides to watch a movie. Leann is making  
A) a decision that does not involve an opportunity cost.  
B) a rational decision if her marginal cost from the movie is greater than her marginal benefit.  
C) a rational decision if her marginal benefit from the movie is greater than her marginal cost.  
D) an irrational decision because studying is more important than watching a movie.  
E) a decision that is not on the margin because she will see the entire movie.

Answer: C

Topic: Making rational choices  
Skill: Level 2: Using definitions  
Section: Checkpoint 1.2  
Status: Old  
AACSBC: Reflective thinking

32) When Gabriel made a rational choice to spend his entire allowance on candy bars, he did so by comparing the  
A) benefits of the candy bars to the desires he had for the candy bars.  
B) marginal benefits of the candy bars to the marginal costs of the candy bars.  
C) opportunity costs of the candy bars to the scarcity of the candy bars.  
D) benefits of the candy bars to the scarcity candy bars.  
E) self-interest to the social interest.

Answer: B

Topic: Making rational choices  
Skill: Level 2: Using definitions  
Section: Checkpoint 1.2  
Status: Old  
AACSBC: Reflective thinking

33) As part of its proposal to win the 2012 Olympics, London developed a carbon offset plan to reduce the Games’ impact on the environment. In 2011, the organizers decided to drop this plan to reduce emissions. We can conclude that  
A) the marginal cost of reducing emissions exceeded the marginal benefits of reducing emissions.  
B) the organizers are not making a rational decision.  
C) the organizers are ignoring a sunk cost.  
D) there are no incentives to reduce carbon emissions.  
E) it is difficult to calculate the cost of reducing emissions.

Answer: A

Topic: Making rational choices  
Skill: Level 2: Using definitions  
Section: Checkpoint 1.2  
Status: Old  
AACSBC: Reflective thinking
34) Going skiing will cost Adam $80 a day. He also loses $40 per day in wages because he has to take time off from work. Adam still decides to go skiing.
   A) His decision is rational if Adam's marginal benefit of spending a day skiing is greater than his marginal cost.
   B) The $80 price of skiing is not an opportunity cost and so did not affect Adam's decision.
   C) He loses a total of $120 per day, so his decision is irrational.
   D) Adam's lost $40 per day in wages is not an opportunity cost and so did not affect his decision.
   E) Adam is definitely making a decision that is in the social interest.

Answer: A

Topic: Making rational choices
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACSBI: Reflective thinking

35) The decision to go to graduate school is a rational one for a college student if the
   A) cost is not too great.
   B) marginal cost exceeds the marginal benefit of graduate school.
   C) marginal benefit of graduate school exceeds the marginal cost.
   D) opportunity cost of graduate school equals zero.
   E) student carefully compared the social benefits of this decision.

Answer: C

Topic: Making rational choices
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACSBI: Reflective thinking

36) An incentive is
   A) an inducement to take a particular action.
   B) the marginal cost of some course of action.
   C) the marginal benefit of some course of action.
   D) the net gain of some course of action.
   E) a constraint that society imposes on those who make self-interested choices.

Answer: A

Topic: Incentives
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACSBI: Reflective thinking
37) An incentive is
   A) a reward or a penalty that encourages or discourages an action.
   B) when people make rational choices by comparing costs and benefits.
   C) what you must give up to get something.
   D) a choice is made on the margin.
   E) a good or service that satisfies wants.
Answer: A

Topic: Incentives
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking

38) A change in a marginal benefit or cost will
   A) increase consumption.
   B) decrease production.
   C) cause an individual to make a rational choice.
   D) increase sunk costs.
   E) change incentives.
Answer: E

Topic: Incentives
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking

39) Proponents of cuts in income tax rates argue that when income tax rates are cut, workers have an incentive to increase their work hours. This argument is based on the assumption that
   A) workers are irrational.
   B) workers make decisions based on the marginal benefit of each hour worked compared to the marginal cost of work.
   C) the opportunity cost of working is negative.
   D) the marginal cost of each additional work hour is not important to most workers.
   E) workers make decisions based on the social interest.
Answer: B

Topic: Incentives
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking
40) Your economics professor offers 10 points extra credit if you attend a review session before your next exam. This extra credit is an example of
   A) a decrease in marginal benefit to attend the review session.
   B) an increase in marginal cost to attend the review session.
   C) a rational choice.
   D) an incentive to attend the review session.
   E) None of the above answers is correct.

Answer: D
Topic: Incentives
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACS B: Reflective thinking

41) If the marginal benefit of getting a college degree rises, rational people will
   A) attend college in greater numbers.
   B) drop out of college.
   C) not change their behavior.
   D) require that college get easier.
   E) raise the marginal cost of attending college.

Answer: A
Topic: Incentives
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACS B: Reflective thinking

42) Correlation means
   A) "after this, therefore because of this."
   B) other things remaining the same.
   C) a natural experiment has been conducted.
   D) the tendency for the values of two variables to move in a predictable and related way.
   E) "on the margin."

Answer: D
Topic: Correlation
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACS B: Reflective thinking
43) Correlation means
   A) holding everything else constant.
   B) after this, therefore because of this.
   C) the values of two variables move in a predictable and related way.
   D) making statements about how the world should be.
   E) the same as causation.

Answer: C

Topic: Correlation
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking

44) In examining two variables, we find that as one variable changes, the other changes. These variables are said to be
   A) independent.
   B) correlated.
   C) statistics.
   D) significantly related.
   E) casually related.

Answer: B

Topic: Correlation
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking

45) When economists use the term "correlation," they are referring to
   A) cause and effect relationships between variables.
   B) how two variables move together in a predictable way.
   C) positive economics.
   D) normative economics.
   E) economic policy.

Answer: B

Topic: Correlation
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking
46) The tendency for the values of two variables to move in a predictable and related way is known as
   A) a natural experiment.
   B) a normative relationship.
   C) an economic model.
   D) correlation.
   E) a policy relationship.
Answer: D
Topic: Correlation
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACS: Reflective thinking

47) A positive statement
   i. makes a statement about how the world operates.
   ii. is a true statement.
   iii. can be tested against the facts.
   A) i and ii
   B) i and iii
   C) ii and iii
   D) i, ii and iii
   E) i only
Answer: B
Topic: Positive statements
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACS: Reflective thinking

48) Which of the following is a positive statement?
   A) An increase in college tuition is not fair to students.
   B) A recession leads to higher enrollments at universities.
   C) University bookstore prices are too high.
   D) Parking tickets on campus impose an excessive fee.
   E) The school needs more parking for students.
Answer: B
Topic: Positive statements
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACS: Reflective thinking
49) The statement that "increases in the tax on gasoline increase the price of gasoline" is an example of a
   A) normative statement.
   B) positive statement.
   C) macroeconomic statement.
   D) rational-decision statement.
   E) marginal statement.

Answer: B

Topic: Positive statements
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking

50) "Lower ticket prices would lead to more people attending ballgames." This statement is a
   A) statement assessing the social interest versus the private interest.
   B) normative statement.
   C) positive statement.
   D) macroeconomic statement.
   E) statement that confuses marginal cost and sunk cost.

Answer: C

Topic: Positive statements
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking

51) A statement that argues that "if taxes on gasoline increase, gasoline consumption will decrease" is an example of what kind of statement?
   A) a marginal statement
   B) a macroeconomic statement
   C) a normative statement
   D) a positive statement
   E) a statement that violates rational choice

Answer: D

Topic: Positive statements
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking
52) Which of the following statements is a positive statement?
   A) Our country must increase military spending.
   B) There should be a computer in every elementary school classroom.
   C) We need to spend less on luxury items for the wealthy, and more on necessities for the
      less fortunate.
   D) Online shopping increased by 50 percent this Christmas season.
   E) Too many people are unemployed.

Answer: D

Topic: Positive statements
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking

53) Which of the following is an example of a positive economic statement?
   A) Voter ID laws should be strictly enforced in all states.
   B) Illegal immigration is the biggest threat to national security that we face today.
   C) Medicare recipients should only be allowed to visit a doctor for non-emergency reasons
      on Mondays, Wednesdays, and Fridays.
   D) The death penalty is a strong deterrent to violent criminal activity.
   E) The Affordable Care Act should be repealed.

Answer: D

Topic: Positive and normative statements
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: New
AACSB: Reflective thinking

54) Increasing income tax rates will solve the "Social Security time bomb issue" is an example of
   A) business economic policy.
   B) a positive economic statement.
   C) marginal cost exceeding marginal benefit.
   D) answering the "how" question.
   E) globalization.

Answer: B

Topic: Positive statements
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSB: Reflective thinking
55) Which of the following is a positive statement?
   A) The rich should pay more in taxes.
   B) Everyone should have some knowledge of economics.
   C) Taxes on gasoline should be lower so that gasoline is more affordable to the poor.
   D) If we reduce welfare payments given to the poor, they will find jobs.
   E) Social Security must be reformed.

Answer: D

56) Normative statements
   i. describe how the world is.
   ii. describe how the world ought to be.
   iii. depend on people's values and cannot be tested.

A) i only.  B) ii only.  C) iii only.  D) ii and iii.  E) i and iii.

Answer: D

57) A normative statement
   A) depends on someone's values.
   B) cannot use the word "should."
   C) says what is currently believed about the way the world operates.
   D) must be tested to determine if it is correct.
   E) can be tested to determine if it is correct.

Answer: A

58) The important characteristic of normative statements is that they
   A) explain what really exists.
   B) are based on somebody's values and cannot be tested.
   C) explain what normally happens in the real world.
   D) help guide us to what will normally occur if some economic variable changes its value.
   E) do not use the ceteris paribus assumption.

Answer: B
59) A normative statement
   i. can be tested as to whether it is true or false.
   ii. is considered negative.
   iii. depends on a person's values.
      A) i only
      B) iii only
      C) i and iii
      D) ii and iii
      E) i, ii, and iii
Answer: B

Topic: Normative statements  
Skill: Level 1: Definition  
Section: Checkpoint 1.2  
Status: Old  
AACSB: Reflective thinking

60) Which of the following is a normative statement?
   A) Flood victims should pay for their own rebuilding.
   B) When the price of kiwi fruit increases, fewer people eat kiwi fruit.
   C) An increase in the supply of computers has caused computer prices to fall.
   D) Recessions lead to increases in the unemployment rate.
   E) Hurricanes strike mainly Florida and North Carolina.
Answer: A

Topic: Normative statements  
Skill: Level 2: Using definitions  
Section: Checkpoint 1.2  
Status: Old  
AACSB: Reflective thinking

61) Which of the following is an example of a normative economic statement?
   A) Universal access to quality health insurance is the most important domestic policy issue of our time.
   B) Extending the time in which laid-off workers are eligible to receive government unemployment compensation has increased the unemployment rate.
   C) Lowering marginal income tax rates depresses consumer spending.
   D) Prices rise when the government prints too much money.
   E) Interest rates rise when the government runs persistent budget deficits.
Answer: A

Topic: Normative statements  
Skill: Level 2: Using definitions  
Section: Checkpoint 1.2  
Status: New  
AACSB: Reflective thinking
62) A statement that "All children should receive free health care" is an example of what kind of statement?
   A) a fair statement
   B) a natural experiment statement
   C) a normative statement
   D) a positive statement
   E) a statement on the margin
   Answer: C
   Topic: Normative statements
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Reflective thinking

63) Which of the following statements is a normative statement?
   A) Inflation has been at an all-time low this year.
   B) The minimum wage should be increased to $8.50 per hour.
   C) Unemployment this month has increased by less than 0.5 percentage point.
   D) Additional spending on education has not produced any rise in test scores.
   E) Pepsi is less expensive than Coke this week.
   Answer: B
   Topic: Normative statements
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Reflective thinking

64) Which of the following is an example of a normative statement?
   A) If cars become more expensive, fewer people will buy them.
   B) Car prices should be affordable.
   C) If wages increase, firms will fire some workers.
   D) Fewer people die in larger cars than in smaller cars.
   E) Cars emit pollution.
   Answer: B
   Topic: Normative statements
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Reflective thinking
65) Which of the following statements is a normative statement?
   A) Every American household should have health care insurance coverage.
   B) Military spending as a percent of government spending decreased by 5 percent in the 1990s.
   C) Welfare reform has decreased the amount the government spends on welfare.
   D) The price of computers fell last year.
   E) Fewer people are unemployed this year than last year.

   Answer: A

   Topic: Normative statements
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Reflective thinking

66) Congress and the President passed a national health care policy. This is an example of
   A) the government using economic tools to make policy decisions.
   B) answering the "how" question.
   C) increasing the marginal cost of health care.
   D) increasing the marginal benefit of health care.
   E) normative versus positive economics.

   Answer: A

   Topic: Government economic policy
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Reflective thinking

67) Opportunity cost is best defined as
   A) how much money is paid for something.
   B) how much money and time it takes to consume something.
   C) the value of the highest-valued alternative that is forgone in making a choice.
   D) the total of all other alternatives that are forgone in making a choice.
   E) the sunk cost of any decision.

   Answer: C

   Topic: Opportunity cost
   Skill: Level 1: Definition
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Reflective thinking
68) John has two hours of free time this evening. He ranked his alternatives, first go to a concert, second go to a movie, third study for an economics exam, and fourth answer his e-mail. What is the opportunity cost of attending the concert for John?
   A) attending a movie
   B) studying for an economics exam
   C) answering his e-mail
   D) attending a movie, studying for an economics exam, and answering his e-mail
   E) going to the concert because that is what John chooses to do

Answer: A

Topic: Opportunity cost
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSB: Analytical thinking

69) Jamie has enough money to buy either a Mountain Dew, or a Pepsi, or a bag of chips. He chooses to buy the Mountain Dew. The opportunity cost of the Mountain Dew is
   A) the Pepsi and the bag of chips.
   B) the Pepsi or the bag of chips, whichever is the highest-valued alternative forgone.
   C) the Mountain Dew.
   D) the Pepsi because it is a drink, as is the Mountain Dew.
   E) zero because he enjoys the Mountain Dew.

Answer: B

Topic: Opportunity cost
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSB: Analytical thinking

70) Amy can study for an hour or spend that hour sleeping or going out for dinner. If she decides to study for the hour, the opportunity cost of the hour spent studying is
   A) definitely going to sleep.
   B) studying, since this is the choice she opted for.
   C) sleeping or going out for dinner, whichever she would have preferred the most.
   D) sleeping and going out for dinner.
   E) definitely going out to dinner because she must eat at some time.

Answer: C

Topic: Opportunity cost
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSB: Analytical thinking
71) If there is no scarcity,
   A) the opportunity cost of an action would be greater than its sunk cost.
   B) an action would have zero opportunity cost.
   C) choices are no longer rational.
   D) marginal cost of an action is greater than its marginal benefit.
   E) all marginal benefits would equal zero.

Answer: B
Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 1.2
Status: Old
AACS: Analytical thinking

72) The benefit of an activity is
   A) purely objective and measured in dollars.
   B) the gain or pleasure that it brings.
   C) the value of its opportunity cost.
   D) measured by what must be given up to get one more unit of the activity.
   E) not measurable on the margin.

Answer: B
Topic: Benefit
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACS: Reflective thinking

73) The _______ of something is the gain or pleasure that it brings.
   A) opportunity cost
   B) benefit
   C) marginal cost
   D) rational choice
   E) rational margin

Answer: B
Topic: Benefit
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACS: Reflective thinking

74) The cost of a one-unit increase in an activity
   A) is called the total one-unit cost.
   B) is called the marginal cost.
   C) decreases as more of the activity is done.
   D) is called the marginal benefit/cost.
   E) is called the unit cost.

Answer: B
Topic: Marginal cost
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACS: Reflective thinking
75) The marginal benefit of an activity is
   i. the benefit from a one-unit increase in the activity.
   ii. the benefit of a small, unimportant activity.
   iii. measured by what the person is willing to give up to get one additional unit of the activity.
   A) i only    B) ii only    C) iii only    D) i and iii    E) ii and iii
   Answer: D
   Topic: Marginal benefit
   Skill: Level 1: Definition
   Section: Checkpoint 1.2
   Status: Old
   AACSBA: Reflective thinking

76) The additional benefit of increasing some activity by one-unit is called the
   A) marginal benefit.
   B) opportunity cost.
   C) total benefit.
   D) scarcity.
   E) unit cost/benefit.
   Answer: A
   Topic: Marginal benefit
   Skill: Level 1: Definition
   Section: Checkpoint 1.2
   Status: Old
   AACSBA: Reflective thinking

77) If the marginal benefit of the next slice of pizza exceeds the marginal cost, you will
   A) eat the slice of pizza.
   B) not eat the slice of pizza.
   C) be unable to choose between eating or not eating.
   D) eat half the slice.
   E) More information is needed about how much the marginal benefit exceeds the marginal cost to determine if you will or will not eat the slice.
   Answer: A
   Topic: Making rational choices
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.2
   Status: Old
   AACSBA: Reflective thinking
78) When people make rational choices, they
    A) behave selfishly.
    B) do not consider their emotions.
    C) weigh the costs and benefits of their options and act to satisfy their wants.
    D) necessarily make a decision in the social interest.
    E) are necessarily making the best decision.

Answer: C

Topic: Rational choice
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACSBS: Reflective thinking

79) By donating $1,000 to the Salvation Army, Caroline reduces her taxable income. To Caroline, the reduction in her taxable income is
    A) a marginal benefit.
    B) an opportunity cost.
    C) an incentive.
    D) a marginal cost.
    E) the margin.

Answer: C

Topic: Incentives
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSBS: Reflective thinking

80) When the Dallas Cowboys score more than 30 points in a game, they win the game. This is an example of
    A) an economic theory.
    B) a correlation.
    C) an incentive to win the game.
    D) a normative statement.
    E) a statement on the margin.

Answer: B

Topic: Correlation
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACSBS: Reflective thinking
81) A positive statement
   A) must always be right.
   B) cannot be tested.
   C) might be right or wrong.
   D) depends on someone’s value judgment.
   E) cannot be negative.

Answer: C

82) Which of the following is a positive statement?
   A) Taxes should be lower because then people get to keep more of what they earn, so they will work more.
   B) My economics class should last for two terms because it is my favorite class.
   C) A 10 percent increase in income leads to a 4 percent increase in the consumption of beef.
   D) Given their negative impact on productivity, the government should eliminate labor unions.
   E) The class average on this test should be more than 80 percent.

Answer: C

83) Which of the following is NOT a normative economic statement?
   A) States should reduce the tax on heating fuel oil during the winter.
   B) People over the age of 75 should not be allowed to drive cars.
   C) Teenagers are responsible for most driving fatalities.
   D) We don’t spend enough money on anti-smoking campaigns.
   E) The price of gasoline is too high.

Answer: C
1.3 Appendix: Making and Using Graphs

1) The horizontal axis in a graph
   A) measures time on a scatter diagram.
   B) measures the quality of a variable.
   C) is named the y-axis.
   D) is named the x-axis.
   E) is called the origin.

Answer: D

Topic: Axes
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 1
Status: Old
AACSBC: Analytical thinking

2) Most economic graphs have two lines perpendicular to each other. The vertical line is called the
   A) origin.      B) y-axis.      C) x-axis.      D) variable.      E) time axis.

Answer: B

Topic: Axes
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 1
Status: Old
AACSBC: Analytical thinking

3) The vertical axis in a graph
   A) is named the y-axis.
   B) is named the x-axis.
   C) measures time in a cross-section and time series graph.
   D) has no origin.
   E) measures time only in a time series graph.

Answer: A

Topic: Axes
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 1
Status: Old
AACSBC: Analytical thinking

4) Most economic graphs have two lines perpendicular to each other. Where these lines meet is called the
   A) origin.      B) y-axis.      C) x-axis.      D) variable.      E) point of beginning.

Answer: A

Topic: Origin
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 1
Status: Old
AACSBC: Analytical thinking
5) A graph of the value of one variable against the value of another variable is known as a
   A) two-dimensional graph.
   B) three-dimensional graph.
   C) time-series graph.
   D) scatter diagram.
   E) two-variable graph.

   Answer: D
   Topic: Scatter diagrams
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 1
   Status: Old
   AACSB: Analytical thinking

6) A scatter diagram can be used to see
   A) if the value of a variable is rising or falling.
   B) the value of a variable for different groups in a population.
   C) if a relationship exists between two variables.
   D) how a variable behaves over time.
   E) whether a variable is positively or negatively related to itself.

   Answer: C
   Topic: Scatter diagrams
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 1
   Status: Old
   AACSB: Analytical thinking

7) To show how a variable ______, we typically use a ______.
   A) relates to another variable; time series graph
   B) relates to another variable; pie chart
   C) changes over time; time series graph
   D) changes over time; cross section graph
   E) changes over time; cross time chart

   Answer: C
   Topic: Scatter diagrams
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 1
   Status: Old
   AACSB: Analytical thinking

8) Which type of graph is most useful in determining if two variables are correlated?
   A) time-series
   B) scatter diagram
   C) cross-section
   D) variable-correlation figure
   E) None of the above answers is correct.

   Answer: B
   Topic: Scatter diagrams
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 1
   Status: Old
   AACSB: Analytical thinking
9) The figure above shows a
   A) time-series graph.
   B) scatter diagram.
   C) cross-section graph.
   D) slope.
   E) trend diagram.
Answer: B

Topic: Scatter diagrams
Skill: Level 1: Definition
Section: Chapter 1 Appendix - Checkpoint 1
Status: Old
AACS B: Analytical thinking

10) A time-series graph measures
   A) the value of one variable against the value of another variable.
   B) the value of an economic variable for different groups in a population at a point in time.
   C) time on the x-axis and the variable or variables in which we are interested on the y-axis.
   D) time on the y-axis and the variable or variables in which we are interested on the x-axis.
   E) time on both the x-axis and y-axis and the variable or variables in which we are interested in the rest of the figure.
Answer: C

Topic: Time-series graph
Skill: Level 1: Definition
Section: Chapter 1 Appendix - Checkpoint 1
Status: Old
AACS B: Analytical thinking
11) A time series graph
   A) shows how a variable changes over time.
   B) uses bars rather than lines.
   C) shows points in a scatter diagram.
   D) is similar to a cross-section graph because both can show trends over time.
   E) is in the shape of a pie.
Answer: A

12) A steep slope in a time series graph means the variable is
   A) high.
   B) falling.
   C) rising or falling quickly.
   D) rising or falling slowly.
   E) very close to its trend point.
Answer: C

13) Which type of economic graph reveals trends in data?
   A) cross-section graph
   B) time-series graph
   C) scatter diagram
   D) Answers A and C are correct.
   E) Answers A, B, and C are all correct.
Answer: B

14) A time series graph
   A) shows how a certain variable changes over time.
   B) uses bars rather than lines.
   C) shows points that are scattered.
   D) depicts a series of good economic times a nation had.
   E) is not useful if the goal is to determine a variable's trend.
Answer: A
15) A time-series graph displays the price of gold. The slope of the line is negative for periods when the
   A) price of gold is falling.
   B) price of gold is rising.
   C) quantity of gold is falling.
   D) price of gold is low and not changing.
   E) price of gold fluctuates.
Answer: A

Topic: Time-series graph
Skill: Level 3: Using models
Section: Chapter 1 Appendix - Checkpoint 1
Status: Old
AACSB: Analytical thinking

16) A graph shows the wage rate of factory workers. The slope of the line is positive for periods when the wage rate is
   A) falling.
   B) rising.
   C) high and not changing.
   D) low and falling.
   E) high and falling.
Answer: B

Topic: Time-series graph
Skill: Level 3: Using models
Section: Chapter 1 Appendix - Checkpoint 1
Status: Old
AACSB: Analytical thinking

17) A trend is
   A) a measure of closeness on a scatter diagram.
   B) a general tendency for a variable to rise or fall.
   C) the maximum value of a variable.
   D) the minimum value of a variable.
   E) the difference between the maximum value of a variable and the minimum value of the variable.
Answer: B

Topic: Trend
Skill: Level 1: Definition
Section: Chapter 1 Appendix - Checkpoint 1
Status: Old
AACSB: Analytical thinking
18) A time series graph reveals whether there is a ______, which represents _______.
   A) trend in a variable; a general tendency for the variable to rise or fall
   B) relationship between two variables; a cross-section relationship
   C) trends in two variables; unrelated variables
   D) relationship between two variables; a trend in a variable
   E) cross-section relationship; a general tendency for the variables to rise or fall

Answer: A

Topic: Trend
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 1
Status: Old
AACSBS: Analytical thinking

19) Trend refers to
   A) the scale used on the x- and y-axes.
   B) increases but not decreases of a variable.
   C) decreases but not increases of a variable.
   D) a general tendency for a variable to rise or fall.
   E) the difference between the maximum value of the variable and the minimum value of the variable.

Answer: D

Topic: Trend
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 1
Status: Old
AACSBS: Analytical thinking
20) In the above figure, the diagram shows
   A) a downward trend in $x$.
   B) an upward trend in $x$.
   C) a scatter diagram.
   D) a two-variable scatter diagram.
   E) a cross-section graph between $x$ and time.

   Answer: A

   Topic: Trend
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix - Checkpoint 1
   Status: Old
   AACS B: Analytical thinking

21) A cross-section graph
   A) is divided into different sections.
   B) shows the values of an economic variable for different groups in a population at a point in time.
   C) measures time on the $x$-axis and the variable in which we are interested on the $y$-axis.
   D) Both answers A and C are correct.
   E) Both answers A and B are correct.

   Answer: B

   Topic: Cross-section graph
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix - Checkpoint 1
   Status: Old
   AACS B: Analytical thinking
22) A graph that shows the value of an economic variable for different groups in a population at a given time is called a 
   A) scatter diagram.  
   B) time-series graph.  
   C) pie chart.  
   D) cross-section graph.  
   E) fixed-time diagram.  
   Answer: D  
   Topic: Cross-section graph  
   Skill: Level 1: Definition  
   Section: Chapter 1 Appendix – Checkpoint 1  
   Status: Old  
   AACSB: Analytical thinking  

23) A graph shows the average wage of various demographic groups in 2012. The kind of graph used to show these data would be a 
   A) scatter diagram.  
   B) time-series graph.  
   C) cross-section graph.  
   D) Venn diagram.  
   E) fixed-year figure.  
   Answer: C  
   Topic: Cross-section graph  
   Skill: Level 3: Using models  
   Section: Chapter 1 Appendix – Checkpoint 1  
   Status: Old  
   AACSB: Analytical thinking  

24) A graph showing the values of an economic variable for different groups in a population at a point in time is called a 
   A) cross-section graph.  
   B) time-series graph.  
   C) scatter diagram.  
   D) Venn diagram.  
   E) None of the above answers is correct.  
   Answer: A  
   Topic: Cross-section graph  
   Skill: Level 1: Definition  
   Section: Chapter 1 Appendix – Checkpoint 1  
   Status: Old  
   AACSB: Analytical thinking
25) ______ shows the values of a variable for different groups in the population at a certain point in time.
   A) A time-series graph
   B) The origin
   C) A cross-section graph
   D) A scatter plot
   E) A trend-line graph

Answer: C

Topic: Cross-section graph
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 1
Status: Old
AACSB: Analytical thinking

26) A cross-section graph
   A) is divided into different sections.
   B) shows values of an economic variable for different groups in a population at a point in time.
   C) measures time on the x-axis and the variable in which we are interested on the y-axis.
   D) Both answers A and C are correct.
   E) Both answers B and C are correct.

Answer: B

Topic: Cross-section graph
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 1
Status: Old
AACSB: Analytical thinking

27) You have data for the amount of rainfall in 50 cities for the month of June. The type of graph to best display these data would be a
   A) time-series graph.
   B) multi-variable time series graph.
   C) cross-section graph.
   D) scatter diagram.
   E) trend-line diagram.

Answer: C

Topic: Cross-section graph
Skill: Level 3: Using models
Section: Chapter 1 Appendix – Checkpoint 1
Status: Old
AACSB: Analytical thinking
28) You have data for sales of pizza for each of the 50 states in 2011. The type of graph to best display these data would be a
   A) cross-section graph.
   B) time-series graph.
   C) scatter diagram.
   D) multi-variable time-series graph.
   E) trend-line diagram.
   Answer: A
   Topic: Cross-section graph
   Skill: Level 3: Using models
   Section: Chapter 1 Appendix – Checkpoint 1
   Status: Old
   AACSB: Analytical thinking

29) A graph shows the average SAT scores for males and females in 2012. The kind of graph used to show these data would be a
   A) scatter diagram.
   B) time-series graph.
   C) cross-section graph.
   D) time-stationary graph.
   E) trend figure.
   Answer: C
   Topic: Cross-section graph
   Skill: Level 3: Using models
   Section: Chapter 1 Appendix – Checkpoint 1
   Status: Old
   AACSB: Analytical thinking

30) Demonstrating how an economic variable changes from one year to the next is best illustrated by a
   A) scatter diagram.
   B) time-series graph.
   C) linear graph.
   D) cross-section graph.
   E) Venn diagram.
   Answer: B
   Topic: Time-series graph
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 1
   Status: Old
   AACSB: Analytical thinking
31) To show the values of an economic variable for different groups in a population at a point in time, it is best to use a
   A) scatter diagram.
   B) time-series graph.
   C) linear graph.
   D) cross-section graph.
   E) trend-section diagram.
Answer: D

32) A graph that shows how the amount of advertising expenditure differs among various industries can be shown
   A) by a cross-section graph.
   B) by a time-series graph.
   C) as a trend.
   D) by a scatter diagram.
   E) by a trend-section graph.
Answer: A

33) A linear relationship
   A) when graphed, is a straight line.
   B) when graphed, is a line whose slope changes.
   C) can be a positive or a negative relationship.
   D) Both answers A and C are correct.
   E) Both answers A and B are correct.
Answer: D
34) A positive relationship exists between two variables if
   A) one variable has "positively" no effect on the other variable.
   B) a decrease in one variable is associated with an increase in the other variable.
   C) a decrease in one variable is associated with a decrease in the other variable.
   D) an increase in one variable is associated with both a decrease and an increase in the other variable.
   E) None of the above answers is correct.
   Answer: C
   Topic: Positive relationship
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 2
   Status: Old
   AACSB: Analytical thinking

35) If two variables are positively related, then
   A) one variable causes the other.
   B) an increase in one variable is accompanied by a decrease in the other.
   C) an increase in one variable is accompanied by an increase in the other.
   D) they change together, but not necessarily in the same direction.
   E) neither variable can be positively related to any other variable.
   Answer: C
   Topic: Positive relationship
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 2
   Status: Old
   AACSB: Analytical thinking

36) As a person increases his or her caloric intake, the person's weight increases, *ceteris paribus*. The relationship between the person's caloric intake and the person's weight is an example of
   A) unrelated variables.
   B) a positive relationship.
   C) a negative relationship.
   D) a single point on a graph.
   E) a trended relationship.
   Answer: B
   Topic: Positive relationship
   Skill: Level 2: Using definitions
   Section: Chapter 1 Appendix – Checkpoint 2
   Status: Old
   AACSB: Analytical thinking
37) If there is a positive relationship between two variables,
   A) the graph of the relationship will be upward sloping.
   B) the graph of the relationship will be downward sloping.
   C) the slope of the line graphing the relationship will be negative.
   D) Both answers A and C are correct.
   E) Both answers B and C are correct.
Answer: A

Topic: Positive relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACS: Analytical thinking

38) If the change in \( y = 10 \) and the change in \( x = 3 \), there is
   A) a positive relationship between \( y \) and \( x \).
   B) a negative relationship between \( y \) and \( x \).
   C) an independent relationship between \( y \) and \( x \).
   D) no relationship between \( y \) and \( x \).
   E) a +0.33 relationship between the two variables.
Answer: A

Topic: Positive relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACS: Analytical thinking

39) Whenever people’s incomes increase, they buy more guitars. Hence a scatter diagram shows that the relationship between income and guitars purchased is
   A) a positive relationship.
   B) a linear relationship.
   C) a negative relationship.
   D) some sort of relationship, but whether it is positive or negative depends on whether income is plotted on the vertical or horizontal axis.
   E) a U-shaped relationship.
Answer: A

Topic: Positive relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACS: Analytical thinking
40) Which of the following statements is correct?
   A) When a line slopes downwards moving to the right, the variable measured on the $x$-axis and the variable measured on the $y$-axis are directly related.
   B) When a line slopes upwards moving to the right, the variable measured on the $x$-axis and the variable measured on the $y$-axis are directly related.
   C) The higher the temperature, the more ice cream people consume. Thus the temperature and ice cream consumption are inversely related.
   D) If two variables are directly related, a graph of the two variables has a negative slope.
   E) None of the above statements is correct.
   Answer: B
   Topic: Positive and negative relationships
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 2
   Status: Old
   AACSB: Analytical thinking

41) If $x$ increases whenever $y$ decreases, then $x$ and $y$ are
   A) not related.
   B) positively related.
   C) directly related.
   D) negatively related.
   E) related but whether positively or negatively related depends on whether the $x$ variable or the $y$ variable is plotted on the vertical axis.
   Answer: D
   Topic: Negative relationship
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 2
   Status: Old
   AACSB: Analytical thinking

42) Whenever one variable increases, another variable decreases. The two variables are
   A) definitely related through a third variable.
   B) negatively related.
   C) positively related.
   D) unrelated to each other.
   E) related but whether positively or negatively related depends on which variable is plotted on the vertical axis.
   Answer: B
   Topic: Negative relationship
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 2
   Status: Old
   AACSB: Analytical thinking
43) If \( x \) increases and as a result \( y \) decreases, then \( x \) and \( y \) are
A) not related because the relationship is a causal one.
B) positively related.
C) negatively related.
D) directly related.
E) trend-line related.
Answer: C

Topic: Negative relationship
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACS: Analytical thinking

44) "As the price of gasoline increases, fewer people buy cars that are gas guzzlers." A graph showing this relationship would
A) have a negative slope.
B) have a positive relationship.
C) have a direct relationship.
D) be a horizontal line.
E) be a vertical line.
Answer: A

Topic: Negative relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACS: Analytical thinking

45) As the number of days without rain increases, the amount of wheat grown per acre declines. A graph showing this relationship shows
A) a horizontal line.
B) a vertical line.
C) a positive relationship.
D) a line with a positive slope.
E) None of the above answers is correct.
Answer: E

Topic: Negative relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACS: Analytical thinking
46) As the price of home heating oil rises, families buy less home heating oil. Hence a scatter diagram with the price of home heating oil on the vertical axis and the quantity purchased on the horizontal axis reveals a ________ relationship.

A) positive  
B) linear  
C) time-series  
D) negative  
E) cross-sectional

Answer: D

Topic: Negative relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking

47) If the change in $y = -4$ and the change in $x = 2$, there is

A) an independent relationship between $y$ and $x$.  
B) a positive relationship between $y$ and $x$.  
C) a negative relationship between $y$ and $x$.  
D) no relationship between $y$ and $x$.  
E) a relationship between $x$ and $y$ but more information is needed to determine if it is a negative or positive relationship.

Answer: C

Topic: Negative relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking

48) An independent relationship between two variables is shown in a graph by

A) an upward-sloping line.  
B) a horizontal or a vertical line.  
C) a downward-sloping line.  
D) a steeply sloped line.  
E) any straight line curve.

Answer: B

Topic: Unrelated variables
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking
49) If two variables are unrelated, their graph is
   A) either a horizontal or a vertical line.
   B) a downward-sloping line.
   C) an upward-sloping line.
   D) a curved line.
   E) None of the above answers is correct because it is not possible to graph unrelated variables.

   Answer: A

   Topic: Unrelated variables
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 2
   Status: Old
   AACSB: Analytical thinking

50) Consider a diagram in which the variable measured on the y-axis remains constant while the variable measured on the x-axis increases. The graph of these two variables is
   A) a vertical line.
   B) a horizontal line.
   C) a line that has positive slope.
   D) a line that has a negative slope.
   E) non-existent because the two variables are not related.

   Answer: B

   Topic: Unrelated variables
   Skill: Level 2: Using definitions
   Section: Chapter 1 Appendix – Checkpoint 2
   Status: Old
   AACSB: Analytical thinking

51) A graph shows the price of a pound of cucumbers on the vertical axis and the quantity of new cars sold by Honda on the horizontal axis. The price of a pound of cucumbers remains constant as the quantity of new cars sold increases. The graph of these data is a
   A) horizontal line.
   B) vertical line.
   C) curve with a maximum.
   D) positively sloped line.
   E) negatively sloped line.

   Answer: A

   Topic: Unrelated variables
   Skill: Level 2: Using definitions
   Section: Chapter 1 Appendix – Checkpoint 2
   Status: Old
   AACSB: Analytical thinking
52) Matt pays a $50 a month membership fee at Bruno’s Gym. He can exercise at the gym as many times as he wishes. If the membership fee is measured along the vertical axis and the number of times he exercises is measured along the horizontal axis, the graph between his membership fee and the number of times he exercises will

A) be a horizontal line.
B) be positively sloped.
C) be negatively sloped.
D) be a vertical line.
E) start out positively sloped and then, as Matt loses interest, become negatively sloped.

Answer: A

53) In the above figure, as the $y$ variable increases,

A) the $x$ variable is constant.
B) the $x$ variable increases.
C) the $x$ variable decreases.
D) the $x$ variable at first increases but then decreases.
E) the $x$ variable probably changes, but more information is needed to determine if it increases, decreases, or stays the same.

Answer: A
54) In the above figure, a negative relationship between $x$ and $y$ is shown in Figure
A) A.
B) B.
C) C.
D) D.
E) B and Figure C.

Answer: B

Topic: Negative relationship
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking
55) In the above figure, no relationship between $x$ and $y$ is shown in Figure
A) A.
B) B.
C) C.
D) D.
E) A and Figure B.
Answer: C
Topic: Unrelated variables
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking
56) In the diagram above, which figure(s) show(s) a direct relationship between the variables?
   A) both B and C
   B) both A and C
   C) only A
   D) only D
   E) only B

Answer: B

Topic: Positive relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking
57) In the diagram above, which figure(s) show(s) an inverse relationship between the variables?

A) both B and C
B) only B
C) both A and C
D) only D
E) only C

Answer: B

Topic: Negative relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking

58) In the diagram above, which figure(s) show(s) no relationship between the variables?

A) both B and C
B) only B
C) both A and C
D) only D
E) both A and B

Answer: D

Topic: Unrelated variables
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking

59) If a curve rises and then falls, it has a

A) maximum.
B) minimum.
C) linear relationship.
D) constant slope relationship.
E) slope that is negative and then positive.

Answer: A

Topic: Maximum
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking
60) As a shoe factory adds more workers, shoe production grows, reaches a maximum, and then shrinks. In a diagram that has the number of workers on the horizontal axis and the number of shoes on the vertical axis, the relationship between the number of workers and the number of shoes starts as _______ and then, after the maximum point, is _______.

A) positive; negative  
B) negative; positive  
C) linear; negative  
D) positive; linear  
E) positive; nonexistent

Answer: A

Topic: Maximum  
Skill: Level 3: Using models  
Section: Chapter 1 Appendix - Checkpoint 2  
Status: Old  
AACSBl: Analytical thinking

61) As a curve approaches a maximum point, the slope will

A) be positive and then negative after the maximum point.  
B) be negative and then positive after the maximum point.  
C) remain constant on either side of the maximum point.  
D) increase before and after the maximum point.  
E) decrease before and after the maximum point.

Answer: A

Topic: Maximum  
Skill: Level 2: Using definitions  
Section: Chapter 1 Appendix - Checkpoint 2  
Status: Old  
AACSBl: Analytical thinking
62) In the figure above, the relationship between the x variable and the y variable
   A) is positive.
   B) is negative.
   C) starts by being positive and then becomes negative.
   D) starts by being negative and then becomes positive.
   E) is non-existent because the two variables are unrelated.

   Answer: C

63) If a curve falls and then rises, it
   A) has a maximum.
   B) has a minimum.
   C) has a linear relationship.
   D) has a constant slope relationship.
   E) shows no relationship between the two variables.

   Answer: B
64) Moving from left to right, a U-shaped curve starts with a
   A) positive slope, reaches a maximum, then ends with a negative slope.
   B) positive slope, reaches a minimum, then ends with a negative slope.
   C) negative slope, reaches a maximum, then ends with a positive slope.
   D) negative slope, reaches a minimum, then ends with a positive slope.
   E) negative slope, reaches a minimum, then ends with a negative slope.
Answer: D

Topic: Minimum
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix - Checkpoint 2
Status: Old
AACS: Analytical thinking

65) The minimum point of a U-shaped curve
   A) is a point where the variable is neither increasing nor decreasing.
   B) has a slope equal to zero.
   C) has the maximum slope possible.
   D) Both answers A and B are correct.
   E) Both answers A and C are correct.
Answer: D

Topic: Minimum
Skill: Level 1: Definition
Section: Chapter 1 Appendix - Checkpoint 2
Status: Old
AACS: Analytical thinking

66) An economist observed that as more computers are added to a factory, the costs of production initially decline, reach a minimum, and then rise. In a diagram that has costs on the vertical axis and the number of computers on the horizontal axis, the relationship always is
   A) negative and then linear after the minimum point.
   B) positive and then negative after the minimum point.
   C) negative and then positive after the minimum point.
   D) linear and then positive after the minimum point.
   E) negative both before and after the minimum point.
Answer: C

Topic: Minimum
Skill: Level 3: Using models
Section: Chapter 1 Appendix - Checkpoint 2
Status: Old
AACS: Analytical thinking
67) If whenever one variable increases, another variable also increases, then these two variables are ______ related.
   A) positively
   B) negatively
   C) inversely
   D) cross-sectionally
   E) trend-line

Answer: A

Topic: Positive relationship
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking

68) The graph shows a
   A) positive relationship that becomes steeper.
   B) negative relationship that becomes steeper.
   C) positive relationship that becomes less steep.
   D) negative relationship that become less steep.
   E) negative trend between the total cost of a cake and the output of cakes.

Answer: A

Topic: Positive relationship
Skill: Level 3: Using models
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking
69) A graph of the relationship between two variables is a line that slopes down to the right. These two variables are ________ related.
   A) positively
   B) directly
   C) negatively
   D) not
   E) trend–line
Answer: C
Topic: Negative relationship
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSBI: Analytical thinking

70) A graph shows that the number of U.S. tourists visiting a Caribbean island increases as the temperature in the northeastern United States falls. The graph shows
   A) a positive relationship.
   B) a direct relationship.
   C) a negative relationship.
   D) no relationship.
   E) an invalid relationship.
Answer: C
Topic: Negative relationship
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSBI: Analytical thinking
71) The graph shows a
   A) positive relationship that becomes less steep.
   B) negative relationship that is linear.
   C) positive relationship that is linear.
   D) negative relationship that becomes less steep.
   E) None of the above answers is correct.

Answer: B

Topic: Negative relationship
Skill: Level 3: Using models
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking
72) The graph shows
   A) a relationship with a minimum.
   B) a relationship with a maximum.
   C) no relationship.
   D) a linear relationship.
   E) a cross-section relationship.

Answer: B

Topic: Maximum
Skill: Level 3: Using models
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACS: Analytical thinking
73) The graph shows
   A) a relationship with a minimum.
   B) a relationship with a maximum.
   C) no relationship.
   D) a relationship that becomes less steep.
   E) a cross-section relationship.
Answer: A

74) Two variables are unrelated if their graph is
   i. a vertical line.
   ii. a 45 degree line.
   iii. a horizontal line.
      A) i only
      B) ii only
      C) iii only
      D) i and iii
      E) i, ii, and iii
Answer: D
75) The graph shows
   A) a positive relationship that becomes less steep.
   B) a negative relationship that is linear.
   C) a positive relationship that is linear.
   D) no relationship between the variables.
   E) a trend relationship between the variables.

   Answer: D

   Topic: Unrelated variables
   Skill: Level 3: Using models
   Section: Chapter 1 Appendix – Checkpoint 2
   Status: Old
   AACSB: Analytical thinking

76) A slope is measured as the
   A) value of the variable measured on the y-axis divided by the value of the variable measured on the x-axis.
   B) value of the variable measured on the x-axis divided by the value of the variable measured on the y-axis.
   C) change in the value of variable on the y-axis divided by the change in the value of the variable on the x-axis.
   D) value of the variable measured on the y-axis minus the value of the variable measured on the x-axis.
   E) change in the value of variable on the x-axis divided by the change in the value of the variable on the y-axis.

   Answer: C

   Topic: Slope
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 3
   Status: Old
   AACSB: Analytical thinking
77) A slope is measured as the
   A) value of the variable measured on the y-axis divided by the value of the variable measured on the x-axis.
   B) value of the variable measured on the x-axis divided by the value of the variable measured on the y-axis.
   C) change in the value of variable on the y-axis divided by the change in the value of the variable on the x-axis.
   D) value of the variable measured on the y-axis minus the value of the variable measured on the x-axis.
   E) value of the variable measured on the x-axis minus the value of the variable measured on the y-axis.

Answer: C

Topic: Slope
Skill: Level 1: Definition
Section: Chapter 1 Appendix - Checkpoint 3
Status: Old
AACS: Analytical thinking

78) "The change in the value of the variable measured on the y-axis divided by the change in the value of the variable measured on the x-axis" is the definition of
   A) a graph.
   B) slope.
   C) a curve.
   D) a relationship.
   E) a trend.

Answer: B

Topic: Slope
Skill: Level 1: Definition
Section: Chapter 1 Appendix - Checkpoint 3
Status: Old
AACS: Analytical thinking

79) The slope of a line equals the change in the variable measured along the
   A) x-axis divided by the change in the variable measured along the y-axis.
   B) y-axis divided by the change in the variable measured along the x-axis.
   C) x-axis minus the change in the variable measured along the y-axis.
   D) x-axis multiplied by the change in the variable measured along the y-axis.
   E) y-axis minus the change in the variable measured along the x-axis.

Answer: B

Topic: Slope
Skill: Level 1: Definition
Section: Chapter 1 Appendix - Checkpoint 3
Status: Old
AACS: Analytical thinking
80) The slope
   A) of a straight line is the same regardless of where on the line it is calculated.
   B) equals the change in the value of the variable measured on the $x$-axis divided by the
      change in the variable measured on the $y$-axis.
   C) will be small if a large change in the variable measured on the $y$-axis is associated with a
      small change in the variable measured on the $x$-axis.
   D) equals the change in the value of the variable measured on the $y$-axis minus the change
      in the variable measured on the $x$-axis.
   E) falls as the $x$ variable increases if the line has a negative slope.

Answer: A

Topic: Slope
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking

81) With $y$ measured on the vertical axis and $x$ measured on the horizontal axis, the slope of a
straight line is defined as
   A) $y/x$.
   B) $x/y$.
   C) $(\text{change in } y)/(\text{change in } x)$.
   D) $(\text{change in } x)/(\text{change in } y)$.
   E) $y - x$.

Answer: C

Topic: Slope of a straight line
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking

82) In a graph, a straight line has a negative slope if the line
   A) is vertical.
   B) is horizontal.
   C) falls from left to right.
   D) rises from left to right.
   E) shows a trend.

Answer: C

Topic: Slope
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking
83) A curve with a positive but decreasing slope represents a relationship where, every time the variable measured along the horizontal axis increases by one unit, the variable measured along the vertical axis
   A) increases by a constant amount.
   B) increases by an increasing amount.
   C) increases by a decreasing amount.
   D) decreases.
   E) does not change by much.
Answer: C

Topic: Slope
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSBS: Analytical thinking

84) The slope
   A) of a straight line is the same regardless of where on the line it is calculated.
   B) equals the change in the value of the variable measured on the vertical axis divided by the change in the variable measured along the horizontal axis.
   C) will be small if a large change in the variable measured on the vertical axis is associated with a small change in the variable measured along the horizontal axis.
   D) Answers A and B are correct.
   E) Answers A and C are correct.
Answer: D

Topic: Slope
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSBS: Analytical thinking

85) Which of the following statements is correct?
   A) The slope of a straight line changes depending where on the line it is calculated.
   B) The slope of a curved line is not defined because it is impossible to calculate the slope along a curved line.
   C) A straight line that slopes upward moving to the right has a positive slope.
   D) Answers A and B are correct.
   E) Answers A and C are correct.
Answer: C

Topic: Slope
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSBS: Analytical thinking
86) If a small change in the $x$ variable results in a large change in the $y$ variable, the curve will be
   A) positively sloped.
   B) negatively sloped.
   C) steep.
   D) flat.
   E) trended.
Answer: C
Topic: Slope
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking

87) Suppose the relationship between a person’s age and his or her height is plotted with the age measured along the $x$-axis and the height measured along the $y$-axis. Then, the curve showing this relationship is
   A) a straight line with a positive slope.
   B) positively sloped and becoming less steep.
   C) a straight line with a negative slope.
   D) negatively sloped and becoming less steep.
   E) positively sloped and becoming more steep.
Answer: B
Topic: Positive slope
Skill: Level 3: Using models
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking

88) If the quantity of the variable on the $y$-axis increases by 10 when the quantity of the variable on the $x$-axis decreases by 2, then the slope of the curve equals
   A) 2.
   B) -10.
   C) 10.
   D) -5.
   E) None of the above answers is correct.
Answer: D
Topic: Slope
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking

89) If the quantity of the variable on the $y$-axis increases by 3 when the quantity of the variable on the $x$-axis increases by 4, then the slope of the curve equals
   A) 3.
   B) 4.
   C) 3/4.
   D) 4/3.
   E) 1.
Answer: C
Topic: Slope
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking
90) The above figure shows the relationship between the price of a slice of pizza and how many slices of pizza Ricardo buys in a week. Between points A and B, the slope of the line equals

A) \(-5\).
B) \(-4\).
C) \(-3\).
D) \(-1\).
E) \(-2\)

Answer: D
Topic: Slope
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACS: Analytical thinking

91) The above figure shows the relationship between the price of a slice of pizza and how many slices of pizza Ricardo buys in a week. Between points A and B, the slope of the line is

_______ the slope of the line between points B and C.

A) greater than
B) equal to
C) less than
D) unrelated to
E) not comparable to

Answer: B
Topic: Slope
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACS: Analytical thinking
92) Moving rightward along a straight line, the slope of the line
   A) always increases.
   B) always decreases.
   C) stays the same.
   D) increases if the line slopes upward to the right.
   E) decreases if the line slopes downward to the right.

   Answer: C
   Topic: Slope of a straight line
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 3
   Status: Old
   AACSB: Analytical thinking

93) A straight line falls when moving rightward along it. Hence the slope of the line is
   A) positive.
   B) negative.
   C) undefined.
   D) zero because it is a straight line.
   E) perhaps positive, negative, or zero, but without more information it is impossible to determine.

   Answer: B
   Topic: Slope of a straight line
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 3
   Status: Old
   AACSB: Analytical thinking

<table>
<thead>
<tr>
<th>x variable (on the horizontal axis)</th>
<th>y variable (on the vertical axis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>200</td>
<td>125</td>
</tr>
<tr>
<td>300</td>
<td>200</td>
</tr>
</tbody>
</table>

94) The table above shows data on two variables. If these data were graphed, the slope of the line would be

   Answer: D
   Topic: Slope of a straight line
   Skill: Level 2: Using definitions
   Section: Chapter 1 Appendix – Checkpoint 3
   Status: Old
   AACSB: Analytical thinking
95) The slope of the line shown in the above figure is


Answer: D

Topic: Slope of a straight line
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking
96) The slope of the line shown in the above figure is

A) 5.  B) 2/5.  C) 2/3.  D) 5/2.  E) 2.

Answer: B

Topic: Slope of a straight line
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking
97) The slope of the line shown in the above figure is
   A) -1 1/3.  B) -1 2/3.  C) -1.25.  D) -0.80.  E) 5.

Answer: C

Topic: Slope of a straight line
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking
98) The figure above shows the relationship between the time a student spends studying and the student's GPA that semester. The slope of the relationship at point A equals

A) 3.  
B) 3/20  
C) 2/20.  
D) 1/20.  
E) 0.

Answer: D

Topic: Slope
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSBA: Analytical thinking
99) In the above figure, which of the figures shows a relationship between $x$ and $y$ with a negative slope?
   A) Figure A
   B) Figure B
   C) Figure C
   D) Figure D
   E) Both Figure A and Figure B

Answer: B

Topic: Negative slope
Skill: Level 1: Definition
Section: Chapter 1 Appendix - Checkpoint 3
Status: Old
AACSB: Analytical thinking
100) In the above figure, which of the figures show(s) a relationships between \( x \) and \( y \) with a positive slope?
A) Figure A and Figure D  
B) Figure B and Figure C  
C) Figure C only  
D) Figure D only  
E) Figure A and Figure B  
Answer: A  
*Topic: Positive slope  
*Skill: Level 2: Using definitions  
*Section: Chapter 1 Appendix – Checkpoint 3  
*Status: Old  
*AACSB: Analytical thinking*

101) The figure above shows the relationship between the time a student spends studying and the student’s GPA that semester. This figure shows _______ relationship between the time spent studying and the GPA.
A) a positive but not linear  
B) a negative  
C) no  
D) a positive, linear  
E) a cross-sectionally trended  
Answer: A  
*Topic: Positive relationship  
*Skill: Level 2: Using definitions  
*Section: Chapter 1 Appendix – Checkpoint 3  
*Status: Old  
*AACSB: Analytical thinking*
102) The figure above shows the relationship between the time a student spends studying and the student’s GPA that semester. The slope of the relationship at point A ________ the slope at point B.

A) is greater than
B) is less than
C) is equal to
D) cannot be compared to
E) can be compared but more information is needed to determine whether the slope is greater than, less than, or equal to

Answer: A

Topic: Slope
Skill: Level 3: Using models
Section: Chapter 1 Appendix - Checkpoint 3
Status: Old
AACSB: Analytical thinking
103) In the above, which figure(s) show(s) relationship between the variables that is always positive?
   A) Figure A only
   B) Figures C and D
   C) Figures A and C
   D) Figures A, C, and D
   E) Figures A and B

   Answer: C

   Topic: Positive relationship
   Skill: Level 3: Using models
   Section: Chapter 1 Appendix - Checkpoint 3
   Status: Old
   AACSB: Analytical thinking
104) In the above, which figure(s) show a relationship between the variables that is always negative?
   A) Figure A only
   B) Figure D only
   C) Figures A and C
   D) Figures A, C, and D
   E) Figure B only
   Answer: B
   Topic: Negative relationship
   Skill: Level 3: Using models
   Section: Chapter 1 Appendix – Checkpoint 3
   Status: Old
   AACSB: Analytical thinking

105) In the above, which figure shows both a positive and a negative relationship between the variables?
   A) Figure A
   B) Figure B
   C) Figure C
   D) Figure D
   E) Figure A, B, and D
   Answer: B
   Topic: Positive and negative relationships
   Skill: Level 3: Using models
   Section: Chapter 1 Appendix – Checkpoint 3
   Status: Old
   AACSB: Analytical thinking

106) In the above, which figure(s) has (have) at least one point at which the slope equals zero?
   A) Figure B only
   B) Figures A and C
   C) Figure D only
   D) Figures A, C, and D
   E) Figures A and D
   Answer: A
   Topic: Slope
   Skill: Level 3: Using models
   Section: Chapter 1 Appendix – Checkpoint 3
   Status: Old
   AACSB: Analytical thinking
107) In the above, in which figure(s) is the slope the same at every point?
   A) Figure A only
   B) Figures A and C
   C) Figure B only
   D) Figures A, C, and D
   E) Figures C and D

Answer: A

Topic: Slope
Skill: Level 3: Using models
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking

108) The figure above shows the relationship between the price of a dozen roses and the quantity of roses a florist can sell. The relationship between the price and the quantity the florist can sell is

   A) positive.
   B) negative.
   C) nonexistent.
   D) linear.
   E) cross-sectionally trended.

Answer: B

Topic: Negative relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking
109) The figure above shows the relationship between the price of a dozen roses and the quantity of roses a florist can sell. The slope between points $A$ and $B$ is
   A) 20. 
   B) 16. 
   C) 2. 
   D) 4 
   E) nonexistent because at point $A$, no roses are sold.
   Answer: C

**Topic:** Slope  
**Skill:** Level 3: Using models  
**Section:** Chapter 1 Appendix – Checkpoint 3  
**Status:** Old  
**AACSBS:** Analytical thinking

110) The figure above shows the relationship between the price of a dozen roses and the quantity of roses a florist can sell. The slope between points $B$ and $C$ equals
   A) 16.  
   B) 8.  
   C) 4.  
   D) 2.  
   E) 14.
   Answer: C

**Topic:** Slope  
**Skill:** Level 3: Using models  
**Section:** Chapter 1 Appendix – Checkpoint 3  
**Status:** Old  
**AACSBS:** Analytical thinking

111) The figure above shows the relationship between the price of a dozen roses and the quantity of roses a florist can sell. The slope between points $C$ and $D$ equals
   A) 8.  
   B) 4.  
   C) 2.  
   D) 1.  
   E) 12
   Answer: D

**Topic:** Slope  
**Skill:** Level 3: Using models  
**Section:** Chapter 1 Appendix – Checkpoint 3  
**Status:** Old  
**AACSBS:** Analytical thinking
112) In the figure above, between points A and B, what is the slope of the line?

A) 4  B) 1  C) 3  D) −3  E) 0

Answer: D

Topic: Slope
Skill: Level 3: Using models
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking
113) What is the slope of the line in the graph?
A) \(+\frac{1}{2}\)  B) \(-\frac{1}{2}\)  C) \(+2\)  D) \(-2\)  E) \(-\frac{3}{4}\)

Answer: A

Topic: Slope of a straight line
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking
114) The slope of the curve at point B
   A) is greater than the slope at point A.
   B) is less than the slope at point A.
   C) is equal to the slope at point A.
   D) cannot be compared with the slope at point A.
   E) can be compared with the slope at point A, but more information is needed to determine if the slope is greater than, less than, or equal to the slope at point A.

Answer: B
Topic: Slope
Skill: Level 3: Using models
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking

115) The Latin term "ceteris paribus" means
   A) "false unless proven true."
   B) "other things remaining the same."
   C) "after this, therefore because of this."
   D) "what is true of the whole is not necessarily true of the parts."
   E) "obviously true."

Answer: B
Topic: Ceteris paribus
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 4
Status: Old
AACSB: Reflective thinking
116) Which of the following statements is the best example of the term *ceteris paribus*?
   A) An economist holds other factors constant when he examines the relationship between tax rates and tax revenues.
   B) More money should be spent on cleaning up the environment.
   C) The government budget surplus was $200 billion in 2000 because the economy was growing.
   D) An increase in the budget surplus after an increase in tax rates implies that tax rate increases cause budget surpluses.
   E) When studying the effects of a budget deficit, an economist must take account of all the factors involved.

Answer: A

Topic: *Ceteris paribus*
Skill: Level 3: Using models
Section: Chapter 1 Appendix – Checkpoint 4
Status: Old
AACSB: Reflective thinking

117) To graph a relationship involving more than two variables, we use which assumption?
   A) linear assumption
   B) positive relationship assumption
   C) marginal analysis
   D) *ceteris paribus*
   E) trend assumption

Answer: D

Topic: *Ceteris paribus*
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 4
Status: Old
AACSB: Analytical thinking

118) To graph a relationship among several variables, we hold all but ______ variable(s) constant and use the ______ assumption.
   A) one; scarcity
   B) two; *ceteris paribus*
   C) three; scarcity
   D) one; *ceteris paribus*
   E) one; absence of trend

Answer: B

Topic: Relationships among more than two variables
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 4
Status: Old
AACSB: Analytical thinking
119) We are investigating the relationship among three variables. We have graphed two of them. Suppose that the variable that is not measured on the $x$-axis or the $y$-axis changes. Then, there is

A) a movement along the plotted curve.
B) a shift in the plotted curve.
C) no impact on the plotted curve because the variable is not measured on either of the axes.
D) an omitted variable.
E) a violation of the absence of trend assumption.

Answer: B

Topic: Relationships among more than two variables
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 4
Status: Old
AACSB: Analytical thinking

120) When analyzing graphically the relationship between more than two variables, which of the following must be used?

A) positive slope assumption
B) assumption of little change
C) ceteris paribus
D) negative slope assumption
E) the assumption that only relevant factors change

Answer: C

Topic: Ceteris paribus
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 4
Status: Old
AACSB: Analytical thinking

121) Ceteris paribus when graphing a relationship refers to

A) letting all the variables change at once.
B) changing the origin of the graph.
C) holding constant all but two variables.
D) rescaling the coordinates.
E) swapping the axes so that the $x$-axis is the vertical axis and the $y$-axis is the horizontal axis.

Answer: C

Topic: Ceteris paribus
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 4
Status: Old
AACSB: Analytical thinking
122) When two variables in a graph are related to a third, changing the third causes
A) a movement along the curve.
B) a shift of the curve.
C) no change in the curve because the third variable isn’t on the axes.
D) either a shift or a movement in the curve but more information is needed to determine which occurs.
E) None of the above answers is correct.
Answer: B

Topic: Relationships among more than two variables
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 4
Status: Old
AACSB: Analytical thinking

123) On a graph showing the relationship between x and y, the ceteris paribus condition implies that
A) no other variables are related to x and y.
B) the value of x is held constant.
C) the value of y is held constant.
D) other variables not shown are held constant.
E) the value of x and the value of y are held constant.
Answer: D

Topic: Ceteris paribus
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 4
Status: Old
AACSB: Analytical thinking

124) Three variables are related and two of them are plotted in a figure. If the variable that is not measured on either the x-axis or the y-axis changes, then there is
A) a movement along the drawn curve.
B) a shift in the curve.
C) no impact on the curve because the variable is not measured on either of the axes.
D) either a shift in the curve or a movement along the curve, but more information is needed to determine which.
E) None of the above answers is correct.
Answer: B

Topic: Changes in third variable
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 4
Status: Old
AACSB: Analytical thinking
125) The above figure shows how many pounds of peanuts farmers are willing to sell at different prices per pound of peanuts. If the price of a pound of peanuts is $1 and the price of a pound of pecans is $2, peanut farmers are willing to sell

A) no peanuts.
B) 1000 pounds of peanuts.
C) 2000 pounds of peanuts.
D) 4000 pounds of peanuts.
E) more than 4000 pounds of peanuts.

Answer: A  

Topic: Relationships among more than two variables 
Skill: Level 3: Using models 
Section: Chapter 1 Appendix - Checkpoint 4 
Status: Old 
AACSB: Analytical thinking

126) In the above figure, while drawing the line showing the relationship between the price of a pound of peanuts and the quantity sold, the

A) price of a pound of pecans does not change. 
B) price of a pound of peanuts does not change. 
C) the quantity of peanuts that farmers supply does not change. 
D) Both answers A and B are correct. 
E) Both answers B and C are correct.

Answer: A  

Topic: Ceteris paribus 
Skill: Level 3: Using models 
Section: Chapter 1 Appendix - Checkpoint 4 
Status: Old 
AACSB: Analytical thinking
127) In the figure above, suppose the price of a pound of pecans is negatively related to the quantity of peanuts that farmers are willing to supply. If the price of pecans increases,
   A) the curve will shift rightward.
   B) the curve will shift leftward.
   C) there is a movement along the curve.
   D) the curve will be unaffected.
   E) None of the above answers is correct because the graph assumes that the price of pecans does not change.

Answer: B

128) To graph a relationship that involves more than two variables, we use
   A) a positive relationship.
   B) a direct relationship.
   C) a negative relationship.
   D) ceteris paribus.
   E) movement up along one of the lines showing the relationship between x and y.

Answer: D
129) In the figure above, an increase in $z$ leads to a
A) movement up along one of the lines showing the relationship between $x$ and $y$.
B) movement down along one of the lines showing the relationship between $x$ and $y$.
C) rightward shift of the line showing the relationship between $x$ and $y$.
D) leftward shift of the line showing the relationship between $x$ and $y$.
E) trend change in both $x$ and $y$.

Answer: D

Topic: Relationships among more than two variables
Skill: Level 3: Using models
Section: Chapter 1 Appendix – Checkpoint 4
Status: Old
AACSB: Analytical thinking

130) In the figure above, ceteris paribus, an increase in $x$ is associated with
A) an increase in $y$.
B) a decrease in $y$.
C) an increase in $z$.
D) a random change in $z$.
E) no change in either $y$ or $z$.

Answer: B

Topic: Ceteris paribus
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 4
Status: Old
AACSB: Analytical thinking
1.4 Integrative Questions

1) Suppose you decide to attend summer school and that this is considered a rational choice. When making this choice,
   A) you must ignore the problem of scarcity.
   B) you considered the marginal cost and marginal benefit of your choice.
   C) you have used the *ceteris paribus* assumption.
   D) you have made a positive statement.
   E) you must have considered the social interest.

Answer: B

2) John decides to leave college early and play professional sports. Which of the following economic principles does John use?
   i. personal economic policies
   ii. marginal cost versus marginal benefit analysis
   iii. normative versus positive economics

A) i and ii
B) i, ii and iii
C) ii only
D) i and iii
E) ii and iii

Answer: A

3) Which of the following is true?
   i. A rational choice is always made in the pursuit of social interest.
   ii. Economics is a social science.
   iii. Economists try to understand how the economic world works by testing positive statements.

A) ii and iii
B) only i
C) only ii
D) only iii
E) i and ii

Answer: A
4) Which of the following is true?
   i. A rational choice is made on the margin.
   ii. Microeconomics is the study of the national economy while macroeconomics is the study of the global economy.
   iii. Economists try to understand how the economic world works by testing normative statements.

   A) only i  
   B) i and iii  
   C) only ii  
   D) only iii  
   E) i and ii

Answer: A

Topic: Integrative  
Skill: Level 2: Using definitions  
Section: Integrative  
Status: Old  
AACS: Reflective thinking

5) Will, Bill, and Phil decide to study an extra hour for an exam. Instead of studying, they could have gone out to eat, played football, or watched TV. Which of the following statements is correct?
   A) The benefit the three students receive must be the same because they all make the same choice.
   B) The students made a rational choice as long as they face no scarcity.
   C) The students could each have different opportunity costs.
   D) The marginal cost of the decision is the same if they make the same score on the exam.
   E) Going out to eat, playing football, and watching TV are all called sunk costs.

Answer: C

Topic: Integrative  
Skill: Level 2: Using definitions  
Section: Integrative  
Status: Old  
AACS: Reflective thinking

6) Which of the following is true regarding a normative statement?
   i. It uses the ceteris paribus assumption.
   ii. It is a value judgment.
   iii. It accounts for opportunity costs.

   A) i and iii  
   B) ii and iii  
   C) i only  
   D) ii only  
   E) i, ii, and iii

Answer: D

Topic: Integrative  
Skill: Level 2: Using definitions  
Section: Integrative  
Status: Old  
AACS: Reflective thinking
7) To help unscramble cause and effect, economists
   A) use the concept of opportunity costs.
   B) must use the *ceteris paribus* assumption.
   C) answer the "what" question.
   D) answer the "how" question.
   E) must use normative statements.

Answer: B

8) Which of the following is true regarding this statement? "The president’s decision to spend more money on national defense is smart."
   A) This is a normative statement.
   B) The federal government does not face scarcity.
   C) This topic would be studied in microeconomics.
   D) Social interest must always be more important than self-interest.
   E) *Ceteris paribus* does not apply to the government.

Answer: A

9) Gregory is considering attending a concert with a ticket price of $40. He estimates that the cost of driving to the concert and parking there will add an additional $20. In order to attend the concert, Gregory will have to take time off from his part-time job. He estimates that he will lose 5 hours at work, at a wage of $8 per hour. In terms of dollars, Gregory’s opportunity cost of attending the concert equals
   A) $80.  B) $100.  C) $40.  D) $60.  E) $20.

Answer: B
10) Kevin is re-finishing an antique grandfather clock that he purchased at a flea market for $300. He expects to be able to sell the clock for $450. At the last minute, Kevin discovers that he needs to repair the gears at a cost of $175 to make the clock worth $450 to potential buyers. It turns out that he could also sell the clock now, without completing the additional repairs, for $250. What should Kevin do?

A) He should sell the clock now for $250.
B) He should keep the clock but not make the repairs since the original $300 is a sunk cost.
C) He should complete the additional repairs and sell the clock for $450.
D) He should keep the clock after making the repairs since it is not rational to spend a total of $475 on an item that can only be sold for $450.
E) Kevin is indifferent between selling the clock as is or selling it after completing the repairs.

Answer: C

Topic: Integrative
Skill: Level 5: Critical thinking
Section: Integrative
Status: New
AACS: Application of knowledge

11) Which of the following scenarios describes an action that is NOT rational from an economic point of view?

A) After drinking one martini (shaken, not stirred), James buys and drinks a second martini even though the marginal benefit of the second martini is lower than the marginal benefit of the first.
B) Eric buys a replacement ticket to the basketball game after he realizes that he accidentally left his original ticket at home.
C) Emily chooses to attend a social event on Tuesday night instead of studying even though she has an important exam on Wednesday morning.
D) US Airways sells a last minute ticket to Don for $50 even though its average cost per passenger is $250.
E) None of the above

Answer: E

Topic: Integrative
Skill: Level 5: Critical thinking
Section: Integrative
Status: New
AACS: Application of knowledge

12) Because resources are scarce, economists would say that

A) the best things in life are always free.
B) people's wants are unlimited.
C) every choice has an opportunity cost.
D) anything worth doing is worth doing well.
E) there are no benefits from cooperation.

Answer: C

Topic: Integrative
Skill: Level 5: Critical thinking
Section: Integrative
Status: New
AACS: Reflective thinking
13) Wichita is building a convention center and financing it with revenues raised from a city hotel tax. Local politicians assert that the convention center is essentially free for Wichita residents because out-of-town visitors are paying for it. Someone who is practicing the *economic way of thinking* would disagree because

A) they believe that Wichita does not need a new convention center.
B) there are other projects that could be undertaken with the tax funds.
C) the convention center may not pass a marginal cost–benefit test.
D) the hotel tax may lead to a decline in visits to Wichita.
E) the hotel tax may reduce commercial property values in the area.

Answer: B

**Topic: Integrative**
**Skill: Level 5: Critical thinking**
**Section: Integrative**
**Status: New**
**AACSB: Reflective thinking**

14) Suppose that your public library charges a fixed monthly membership fee of $12. Members are allowed to check out as many books as they want under this plan. The average member checks out 4 books per month. Suppose that your public library changes its policy. Now each book costs $3 to check out but there is no longer a monthly membership fee. What effect do you think the new policy will have on the total number of books checked out from your library each month? The new policy is likely to _____ the number of books checked out because

A) leave unchanged; members have already shown that they are willing to pay $12 to check out 4 books per month
B) leave unchanged; the average cost of the library service is the same under both plans
C) reduce; the marginal benefit of checking out books is now lower under the new policy
D) reduce; the marginal cost of checking out books is now higher under the new policy
E) increase; the average benefit of checking out more than 4 books is now higher under the new policy

Answer: A

**Topic: Integrative**
**Skill: Level 5: Critical thinking**
**Section: Integrative**
**Status: New**
**AACSB: Application of knowledge**
15) In New York City, when he was the mayor Michael Bloomberg recommend that the city, with the help of private donors, make cash payments to poor and underprivileged parents who can certify that their children are attending school on a regular basis. The payments would start after third grade and go through high school, rising each year as dropout rates get higher and a child’s forgone earning potential is higher. What economic concept does this policy represent?
   A) public goods
   B) technological progress
   C) externalities
   D) the "invisible hand"
   E) incentives
   Answer: E

   Topic: Integrative
   Skill: Level 5: Critical thinking
   Section: Integrative
   Status: New
   AACSBS: Reflective thinking

16) Nathan drinks three cups of coffee per day. The marginal benefit that he enjoys from drinking the third cup is
   A) less than the marginal benefit that he receives from drinking the second cup.
   B) the same as the total benefit from drinking all three cups minus the total benefit of drinking the first two cups.
   C) both A and B.
   D) greater than the marginal benefit that he receives from drinking the second cup.
   E) none of the above.
   Answer: C

   Topic: Integrative
   Skill: Level 5: Critical thinking
   Section: Integrative
   Status: New
   AACSBS: Reflective thinking
1.5 Chapter Figures

1) The relationship between distance traveled in 5 hours and speed shown in the figure above is
   A) direct, linear.
   B) inverse, linear.
   C) direct, non-linear.
   D) inverse, positive.
   E) direct, negative.

Answer: A

Topic: Positive relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking

2) The relationship between distance traveled in five hours and speed shown in the figure above is
   A) positive.
   B) negative.
   C) inverse.
   D) cross-sectional.
   E) multilateral.

Answer: A

Topic: Positive relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking
3) The figure above shows the relationship between distance sprinted and recovery time. The curve becomes steeper because as the distance sprinted increases,
   A) the extra recovery time needed from sprinting another 100 yards increases.
   B) the extra recovery time needed from sprinting another 100 yards decreases.
   C) the recovery time increases.
   D) the recovery time decreases.
   E) the relationship between distance sprinted and recovery time becomes more inverse.

Answer: A

Topic: Positive relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix - Checkpoint 3
Status: Old
AACS: Analytical thinking
4) The figure above shows the relationship between study time and the number of problems worked. The curve becomes less steep because as you study more,
   A) study time becomes less effective.
   B) study time becomes more effective.
   C) the number of problems worked increases.
   D) the number of problems worked decreases.
   E) the relationship between study time and the number of problems worked changes from direct to inverse.

Answer: A

Topic: Positive relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSBE: Analytical thinking
5) The figure above shows the relationship between the journey length and the cost of trip per mile. The curve becomes flatter because as the journey length increases,
   A) the fall in the cost per mile becomes smaller.
   B) the fall in the cost per mile becomes greater.
   C) the cost per mile decreases.
   D) the cost per mile increases.
   E) the cost per mile remains unchanged.

Answer: A
Topic: Negative relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking
6) What is the slope of the line in the figure above?

A) 0.75
B) −0.75
C) 1.33
D) −1.33
E) zero

Answer: A

Topic: Slope
Skill: Level 3: Using models
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSBA: Analytical thinking
7) What is the slope of the line in the figure above?
A) 0.75  B) −0.75  C) 1.33  D) −1.33  E) zero

Answer: B

Topic: Slope
Skill: Level 3: Using models
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking
8) In the figure above, what is the slope of the curve at point A?

A) 0.75  B) –0.75  C) 1.33  D) –1.33  E) zero

Answer: B

Topic: Slope
Skill: Level 3: Using models
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACS: Analytical thinking

1.6 Essay: Definition and Questions

1) What is the relationship between wants, resources, scarcity, and choices? Discuss the relationship for an individual and for a society.

Answer: A person faces scarcity whenever his or her wants exceed what he or she can obtain using his or her resources. Because the person cannot fulfill all of his or her wants, the person is forced to choose which wants will be satisfied and which wants will remain unsatisfied. The same results hold true for a society. All societies face scarcity because people’s wants are essentially infinite, so that the resources available are not sufficient to fulfill everyone’s wants. Because of this fact, societies must make choices about which (and whose) wants will be satisfied and which (and whose) wants will remain unsatisfied.

Topic: Scarcity
Skill: Level 2: Using definitions
Section: Checkpoint 1.1
Status: Old
AACS: Written and oral communication
2) Why do economists say that even very rich people face scarcity?
   Answer: A person faces scarcity whenever his or her wants exceed what he or she can obtain using his or her resources. Even very rich people want things that they cannot have. An older rich person, for instance, might want to have all of his or her youthful energy, but medical science cannot (yet) provide this service. Alternatively, another rich person might enjoy life so much that he or she wants 25 hours in a day in order to have more time for more enjoyment. But, such a want is impossible. By way of another, perhaps more realistic example, Malcolm Forbes was the founder of Forbes magazine and was very rich. However, he did not win every piece of art that he bid upon at auctions. Even though Mr. Forbes was very rich, he still passed on some art when the price got so high that he thought given his resources, the price exceeded what he was willing to pay. Mr. Forbes wanted the art, but he was not willing to bid higher in order to win it. Mr. Forbes faced scarcity.

   Topic: Scarcity
   Skill: Level 3: Using models
   Section: Checkpoint 1.1
   Status: Old
   AACSB: Written and oral communication

3) What do economists mean when they discuss “scarcity”?
   Answer: Scarcity occurs whenever people's wants exceed the ability of the available resources to meet these wants. Because people's wants are effectively infinite—it is always possible to imagine more good things to want to have—wants will always exceed what can be produced with the available resources, and so scarcity will always be present.

   Topic: Scarcity
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.1
   Status: Old
   AACSB: Written and oral communication

4) Define economics and describe its branches of study.
   Answer: Economics is the social science that studies the choices made by individuals, businesses, government, and entire societies as they cope with scarcity. It has two branches, microeconomics and macroeconomics. Microeconomics is the study of the choices made by individuals and businesses, the way they interact, and the influence that governments exert on these choices. Macroeconomics is the study of the aggregate (total) effects on the national economy and the global economy of the choices that individuals, businesses, and governments make.

   Topic: Definition of economics
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.1
   Status: Old
   AACSB: Written and oral communication
5) Why does scarcity lead to the what, how, and for whom questions?
   Answer: Human wants exceed the resources available to satisfy them, thereby creating the problem of scarcity of goods and services. Everyone wants more than he or she can have, be it a student dreaming of a faster computer or an extraordinarily rich business leader wishing for more vacation time. Because not all wants can be satisfied, people must make choices about which wants to satisfy. The choices resulting from scarcity mean that people must decide what gets produced, how the products produced, and for whom the products produced.

Topic: Scarcity and economic questions
Skill: Level 1: Definition
Section: Checkpoint 1.1
Status: Old
AACS: Written and oral communication

6) List and explain the three fundamental economic questions that must be answered by all economic systems.
   Answer: First, all economic systems must answer the question of "what goods and services get produced and in what quantities?" In other words, among the near infinite types of goods and services, society must decide what will be produced and how much of each good and service will be produced. Next, every economic system must decide, "how are goods and services produced?" This question needs to be answered because there are always many ways to produce a particular good or service (for instance, using a lot of workers and only a little machinery, or a lot of machinery and fewer workers), so the method that will be used must be decided. Finally, once the goods and services are produced the society must decide "for whom are the various goods and services produced?" In other words, societies must decide whether the goods and services are distributed so that everyone gets about the same amount or whether they are distributed so that some people get more than others.

Topic: Economic questions
Skill: Level 1: Definition
Section: Checkpoint 1.1
Status: Old
AACS: Written and oral communication

7) Pumpkins are grown in New Mexico with the aid of fertilizer. Hence, fertilizer is a partial answer to which of the three economic question?
   Answer: Fertilizer is used to help produce the pumpkins, so it is a partial answer to the "How are goods and services produced?" question.

Topic: Economic questions, how
Skill: Level 3: Using models
Section: Checkpoint 1.1
Status: Old
AACS: Reflective thinking
8) Different nations answer the what, how, and for whom questions differently. China, for instance, builds dams using many workers and only a little capital equipment. The United States builds dams using a few workers and a lot of capital equipment. Which economic question are these two nations answering and why do the answers differ?

Answer: The nations are answering the "how" question because they are determining how to produce a dam. In the main part, the answers differ because the nations have different amounts of capital equipment and labor. China has more people and less capital equipment. Hence it makes sense for China to build dams using many workers and only a little capital equipment. The U.S. has more capital equipment and less labor. Thus it makes sense for the United States to build dams using a lot of capital equipment and only a few workers.

9) The question "Will doctors or lawyers have higher annual incomes?" represents which of the three basic economic questions?

Answer: The amount of goods and services a person can purchase depends on the person’s income. Hence the question of who should be paid more, lawyers or doctors, essentially asks whether lawyers or doctors will be able to buy more goods and services. Thus the question is a microeconomic "For whom?" question.

1.7 Essay: The Economic Way of Thinking

1) What is the difference between microeconomics and macroeconomics?

Answer: Microeconomics studies the decisions of smaller economic actors, such as individual consumers or individual firms, and how the government can affect these decisions, say through how it regulates an industry. Macroeconomics studies the aggregate, or economy-wide, consequences of the decisions made by individuals and firms. Macroeconomics also studies the aggregate effects of government policies, such as the Federal Reserve’s decisions to raise or lower interest rates.
2) What is an opportunity cost? Give an example.
   Answer: An opportunity cost of something is the best thing you must give up to get it. For example, the cost of attending class might be the extra hour of sleep you lose, or the opportunity cost of buying a taco might be the soda you can no longer buy.

Topic: Opportunity cost
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACS: Written and oral communication

3) Your friend is preparing for this exam and in your practice session makes the following statement: "Instead of attending microeconomics class for two hours, Kiki could have played tennis or watched a movie. Therefore, the opportunity cost of attending class is the tennis and the movie she had to give up." Is your friend’s analysis correct or not? Explain your answer.
   Answer: Your friend’s analysis is incorrect. The opportunity cost of an action is the (single) best thing she had to give up, not all the things she had to give up. Kiki’s opportunity cost of studying for her exam is either the tennis or the movie, whichever she would have done had she not studied.

Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 1.2
Status: Old
AACS: Written and oral communication

4) Rather than go out to eat by yourself, you decide to stay at home and fix dinner for yourself and your two roommates. Your roommates applaud your decision. Your roommates tell you that your decision to eat at home has no opportunity cost because you already have all the dinner ingredients in your pantry. Is this comment correct?
   Answer: Your roommates’ comment is incorrect. The opportunity cost of preparing dinner at home is whatever is the best thing you give up, which, given your choice boiled down to staying home or going out, is going out to eat. Hence the opportunity cost of fixing dinner at home is going out to eat.

Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 1.2
Status: Old
AACS: Written and oral communication
5) Shaniq can spend the next hour studying for a finance test, hiking along the Oregon coast, watching reruns of *Lost* on television, or napping. If she decides to study, what is the opportunity cost of her choice: hiking, watching television, or napping?

Answer: With the information given, it is impossible to determine the opportunity cost. The opportunity cost is the highest-valued alternative forgone and the problem does not give Shaniq's ranking of the options. For instance, if Shaniq thinks that if she had not studied she would have watched *Lost*, then watching *Lost* is the opportunity cost. However, if Shaniq thinks that if she were not studying, she would be strolling along the beach, then the beach walk is the opportunity cost.

*Topic: Opportunity cost*
*Skill: Level 3: Using models*
*Section: Checkpoint 1.2*
*Status: Old*
*AACSB: Written and oral communication*

6) For spring break, Melanie will either stay home or go to Daytona Beach. At home, Melanie pays $10 per day for food and earns $90 a day at her job. At Daytona Beach, Melanie will stay with friends and so has no lodging cost. She will pay $20 per day for food. In terms of dollars, Melanie’s opportunity cost per day of going to Daytona Beach is how much?

Answer: Melanie’s opportunity cost of going to Daytona Beach is $100 per day. If she goes, she spends $10 extra for food and loses $90 income from her job, for a total opportunity cost of $100.

*Topic: Opportunity cost*
*Skill: Level 3: Using models*
*Section: Checkpoint 1.2*
*Status: Old*
*AACSB: Reflective thinking*

7) Why is the benefit of something measured by what you are willing to give up?

Answer: The benefit of a good or service, say a slice of pizza, is the pleasure it brings the consumer. But it is impossible to measure someone’s pleasure. In order to measure the benefit of the slice of pizza, we need something that we can measure. Thus, to measure the benefit of the slice of pizza, we ask the consumer what he or she is willing to give up to get the slice of pizza. So, if the consumer was willing to give up, say, three hot dogs to get the slice of pizza, we can determine that the benefit of the slice of pizza to the consumer is three hot dogs.

*Topic: Benefit*
*Skill: Level 2: Using definitions*
*Section: Checkpoint 1.2*
*Status: Old*
*AACSB: Written and oral communication*

8) Define marginal cost and marginal benefit.

Answer: Marginal cost is the opportunity cost of a one-unit increase in an activity. Marginal benefit is the benefit of a one-unit increase in an activity.

*Topic: Marginal benefit, marginal cost*
*Skill: Level 1: Definition*
*Section: Checkpoint 1.2*
*Status: Old*
*AACSB: Reflective thinking*
9) In New State, the bottling law requires that people get a refund of five cents when they return an empty bottle or can. Why does the state pay people to return bottles? In your answer, be sure to mention the role played by rational choice.

Answer: Policy makers know that people making rational choices respond to incentives. Instead of throwing away bottles and cans, people will now bring the used bottles and cans to the designated areas for recycling in order to receive their payment. Thus policy makers have taken advantage of people's rational decision making in order to reduce litter and clean the environment.

Topic: Incentives
Skill: Level 3: Using models
Section: Checkpoint 1.2
Status: Old
AACS: Written and oral communication

10) Must a rational choice always work out well? In other words, is it possible for someone to regret a rational decision?

Answer: It is not necessarily the case that a rational choice always works out well; sometimes people will come to regret a rational decision. Decisions are made based on the information at hand. Sometimes that information is incomplete. For instance, when faced with a math midterm on Thursday, on Wednesday night a student might believe that he or she has a strong grasp of the subject and hence rationally decide to go to a movie rather than study. When the test reveals that the student actually understood little about the math and the student earns a low score, he or she likely regrets not studying. But the regret does not imply that the decision to see the movie was irrational.

Topic: Making rational choices
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACS: Written and oral communication

11) Discuss what is necessary to make rational decisions. Be sure to mention opportunity cost, marginal cost, and marginal benefit.

Answer: Economists assume that people act rationally, making choices in increments and comparing marginal costs and benefits. Costs are measured as opportunity cost, which is the value of the best thing that must be given up. Benefits are subjective, measured by what you are willing to give up. Marginal cost is the additional cost of one more unit of the good and marginal benefit is the additional benefit of one more unit. Marginal cost increases and marginal benefit decreases as more of the activity is considered. A rational decision compares the marginal benefit of the decision to its marginal cost. If the marginal benefit exceeds the marginal cost, the (rational) decision is to undertake the action being contemplated. If the marginal benefit is less than the marginal cost, the (rational) decision is to not undertake the action being considered.

Topic: Making rational choices
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACS: Written and oral communication
12) What is a positive statement? Give an example.

   Answer: A positive statement addresses "what is" and can be tested. An example of a positive statement is "An increase in the price of gasoline decreases the quantity of gasoline demanded."

   Topic: Positive statements
   Skill: Level 1: Definition
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Reflective thinking

13) What is the difference between positive and normative statements?

   Answer: Positive statements tell what is and normative statements tell what ought to be. Positive statements can be tested to determine if they are correct or not, while normative statements use value judgments and so cannot be tested. For example, two economists might agree on the positive assertion that if the government spent its funds purchasing pharmaceutical drugs for poor older Americans rather than poor children, then poor older Americans would use more drugs and poor children would use fewer. But they might disagree on the normative conclusion of whether the government should pursue this policy. One economist might argue "It is not fair to have senior citizens suffer because they cannot afford medicine" and the other economist might argue "It is not fair to have children suffer because their parents cannot afford medicine."

   Topic: Positive and normative statements
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Written and oral communication

14) Two economists can agree that raising the minimum wage creates unemployment yet one might argue that raising the minimum wage is a good policy and the other that it is a bad policy. Why can this difference exist? Be sure to use the terms positive and normative in your answer.

   Answer: Positive statements are statements that describe how the world is. Positive statements can be tested and so, ultimately, any disagreements about positive statements should be resolved. The statement that "Raising the minimum wage creates unemployment" is a positive statement and, on the basis of repeated testing, most economists agree that it is a correct positive statement. Normative statements, however, are statements that describe how the world ought to be. Normative statements depend on people's values and cannot be tested. So one economist might argue that raising the minimum wage is a good policy because this economist thinks that, although it is unfortunate that some people lose their jobs, the fact that others retain their jobs and their wages rise more than outweighs the harm created by the unemployment. Another economist might strongly differ because the second economist thinks that the harm inflicted on people who lose their jobs more than outweighs any good from some workers being paid more. This difference of opinion can last indefinitely because there is no way to test the two economists' beliefs to determine which is correct.

   Topic: Positive and normative statements
   Skill: Level 2: Using definitions
   Section: Checkpoint 1.2
   Status: Old
   AACSB: Written and oral communication
15) Explain whether the statement, "There is life on Mars," is a normative or positive statement.

Answer: The statement is a positive statement because it does not depend on a value judgment. Instead, it is a statement that tries to describe "what is" and hence is testable. Of course, in order to test the assertion, it would be necessary to go to Mars to ascertain if there is life present. While it is difficult (!) at present to actually carry out the test, nonetheless the statement is testable and hence is a positive statement.

Topic: Positive statements
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACS B: Written and oral communication

16) Explain whether the statement, "Hillary Clinton was elected President of the United States in 2008," is a normative or positive statement.

Answer: The statement is a positive statement because it does not depend on a value judgment. Instead, it is a statement that tries to describe "what is" and hence is testable. Now, it is indeed the case that Hillary Clinton was not elected president in 2008, so when we test the statement we discover that it is incorrect. But, whether the statement is correct or not has no bearing on whether the statement is positive or normative. Thus, the statement "Hillary Clinton was elected President in 2008" is a positive, albeit incorrect, statement.

Topic: Positive statements
Skill: Level 3: Using models
Section: Checkpoint 1.2
Status: Old
AACS B: Written and oral communication

17) What is a normative statement? Give an example.

Answer: A normative statement is a statement about what ought to be. It is a value judgment or opinion and so cannot be proven true or false. An example of a normative statement is "Students should attend school year round to receive a better education."

Topic: Normative statements
Skill: Level 1: Definition
Section: Checkpoint 1.2
Status: Old
AACS B: Reflective thinking

18) Explain whether the statement "The government should increase tariffs on Japanese cars to protect the American car industry from competition," is a normative or positive statement.

Answer: The statement is normative. The statement is a normative statement because it depends on a value judgment, namely that the government should protect the American car industry from competition.

Topic: Normative statements
Skill: Level 2: Using definitions
Section: Checkpoint 1.2
Status: Old
AACS B: Reflective thinking
1.8 Essay: Appendix: Making and Using Graphs

1) Why do economists use graphs?
Answer: Graphs help economists, and others, to visualize the relationships between economic variables. Graphs that plot variables together help economists understand if the variables are related and how they are related. Graphs also help provide a visual picture of economic models that link different variables. Indeed, many other disciplines use such visual models. For example, architects work with blueprints (their model) and the blueprints represent every detail of a building. Economists’ models do not reflect every detail of the real world, but the graphs that they use nonetheless are valuable because they help clarify the linkages between the variables.

Topic: Basic idea
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 1
Status: Old
AACSBS: Analytical thinking

2) What kind of information is conveyed in a time-series graph?
Answer: A time series graph reveals four types of information. First, it shows the actual value of the variable or variables at each point in time. Second, it shows whether the variable or variables are rising or falling as time passes. Third, it shows the speed with which the variable or variables are changing. Finally, it shows the presence or absence of a trend.

Topic: Time-series graph
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 1
Status: Old
AACSBS: Analytical thinking
3) In the diagram below, label the \( x \)-axis, the \( y \)-axis, and the origin.

The figure above has the \( x \)-axis, the \( y \)-axis, and the origin labeled.

*Topic: Basic idea*
*Skill: Level 1: Definition*
*Section: Chapter 1 Appendix – Checkpoint 1*
*Status: Old*
*AACSB: Analytical thinking*
4) The table above shows how many blouses Katie and Kim will purchase at different prices for a blouse. In the figure, label the axes and put the price on the y-axis and the quantity of blouses on the x-axis. Plot the data for Katie in the figure. Then, plot the data for Kim in the figure.

<table>
<thead>
<tr>
<th>Price (dollars per blouse)</th>
<th>Katie's purchases (blouses per year)</th>
<th>Kim's purchases (blouses per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>40</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>60</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>80</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Answer:

The figure above shows the labeled axes and has drawn in it the relationships between the price and the quantity of blouses purchased for Katie and Kim.

*Topic: Scatter diagrams
Skill: Level 1: Definition
Section: Chapter 1 Appendix - Checkpoint 1
Status: Old
AACSB: Analytical thinking*
5) The figure above shows the price of a DVD player from 1996 to 2000.
   a. What type of graph is illustrated above?
   b. What is the trend in the price of a DVD player?

   Answer: a. The graph is a time-series graph because it plots time along the horizontal axis and the price of a DVD player along the vertical axis.
   b. The trend in the price of a DVD player is negative, that is, the price of a DVD player has generally decreased from one year to the next.

   Topic: Time-series graph
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 1
   Status: Old
   AACSB: Analytical thinking

6) What are the two different types of relationships that variables can have? Explain each. What do these relationships look like when they are graphed?

   Answer: Variables can have two relationships: positive (or direct) and negative (or inverse). A positive relationship occurs when the variables move in the same direction, so that when one increases, the other also increases. A negative relationship occurs when the variables move in the opposite direction, so that when one increases, the other decreases. When a positive relationship is graphed, the line slopes upward to the right. When a negative relationship is graphed, the line slopes downward to the right.

   Topic: Relationships
   Skill: Level 1: Definition
   Section: Chapter 1 Appendix – Checkpoint 2
   Status: Old
   AACSB: Analytical thinking
7) What is the difference between a positive and a negative relationship?

Answer: Two variables are positively related when an increase (decrease) in one is associated with an increase (decrease) in the other. In this case, the variables move together, in the same direction. Two variables are negatively related when an increase (decrease) in one is associated with a decrease (increase) in the other. In this case, the variables move in the opposite direction.

Topic: Relationships
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking

8) A graph of two variables is a vertical line. What is the interpretation of this result?

Answer: When the graph of two variables is a vertical line, the variables are not related because, with this graph, whenever the variable measured along the vertical axis changes, the variable measured along the horizontal axis does not change.

Topic: Unrelated variables
Skill: Level 1: Definition
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking

9) The figure above shows how the sales of the video game "Tomb Raider—Lara Retires" change when the advertising spent on the game changes. Is the relationship between advertising and the number of games sold positive, negative, or neither? Explain your answer.

Answer: The figure shows that there is a positive relationship between advertising and the number of video games sold. The relationship is positive because the two variables move together: If advertising increases, so, too, does the number of games sold.

Topic: Positive relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking
10) The figure above shows how the relationship between the number of hours per week a high school student spends on the web and the student's SAT score. Is the relationship between hours on the web and the SAT score positive, negative, neither? Explain your answer.

Answer: The figure shows that there is a negative relationship between hours on the web and the student's SAT score. The relationship is negative because the two variables move in opposite directions: If hours on the web increase, the SAT score decreases.

Topic: Negative relationship
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 2
Status: Old
AACSB: Analytical thinking
11) A graph has a point that is either a maximum or a minimum. To the left of the point, the slope of relationship is positive. To the right of the point, the slope is negative. Is the point a maximum point or a minimum point? Be sure to draw a figure that supports your answer.

Answer:

The point is a maximum point. Examine the figure above. The slope of a curved line at any point equals the slope of a straight line that touches the curved line at only that one point. Thus to the left of the maximum point, take point A. The slope of the straight line that touches the curved line at only point A is positive, so the slope of the relationship is positive. Similarly, take point B to the right of the maximum point. As the straight line shows, the slope of the relationship at point B is negative. Indeed, whenever there is a maximum point, the slope of the relationship to the left of the maximum is positive and the slope to the right is negative.

12) What does the slope of a straight line equal? How is the slope of a curved line calculated?

Answer: The slope of a straight line is calculated between two points on the line. Between the two points on the line, the slope equals the change in the value of the variable measured on the vertical axis (the y-axis) divided by the change in the value of the variable measured on the horizontal axis (the x-axis). The slope of a curved line is calculated at a point on the line. At that point on the curved line, draw a straight line that touches the curved line at only that point. Then, calculate the slope of the straight line. The slope of the curved line at that point equals the slope of the straight line.
13) In the figure above, what can you deduce about the slope of the curve?

Answer: The slope is positive and increasing in size as we move rightward along the curve.

Topic: Slope
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix - Checkpoint 3
Status: Old
AACSB: Analytical thinking
<table>
<thead>
<tr>
<th>Katie's Income (dollars per year)</th>
<th>Katie's purchases (books per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50,000</td>
<td>14</td>
</tr>
<tr>
<td>70,000</td>
<td>16</td>
</tr>
<tr>
<td>90,000</td>
<td>18</td>
</tr>
<tr>
<td>110,000</td>
<td>20</td>
</tr>
</tbody>
</table>

14) The table above shows how the number of books Katie buys each year depends on her income. 
   a. What kind of relationship exists between Katie's income and the number of books she purchases?

b. Plot the relationship between Katie's income and the number of books she purchases in the above figure. Measure income along the vertical axis and the number of books along the horizontal axis. Be sure to label the axes.

c. What is the slope of the relationship between $50,000 and $70,000 of income?

d. What is the slope of the relationship between $90,000 and $110,000 of income?

e. Comment on the similarity or dissimilarity of your answers to parts (c) and (d).

Answer: a. There is a positive relationship. When Katie's income increases, so too does her purchase of books.
b. The relationship is plotted in the figure above.

c. The slope equals the change in the value of the variable measured on the vertical axis, income, divided by the change in the value of the variable measured along the horizontal axis, the number of books. Between $50,000 and $70,000 of income, the number of books purchased increases from 14 to 16. Hence income increases by $20,000 and the number of books increases by 2, so the slope equals $20,000/2 = 10,000.

d. As with the previous answer, the slope equals the change in income divided by the change in books. Between $90,000 and $110,000 of income, the number of books purchased increases from 18 to 20. Hence income increases by $20,000 and the number of books increases by 2, so the slope equals $20,000/2 = 10,000.

e. The slopes in parts (c) and (d) are equal. But, they must be equal because the relationship between Katie's income and the number of books she purchases is linear. For a linear relationship, the slope is the same regardless of where it is measured.
15) Graph the data in the table above in the figure. Label the axes.

<table>
<thead>
<tr>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

The figure labels the axes and graphs the relationship.

a. The relationship between X and Y is negative.

b. The slope equals -2.

Answer:

Topic: Slope
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix - Checkpoint 3
Status: Old
AACSB: Analytical thinking
16) In the diagram below, draw a straight line with a slope of zero.

A horizontal line has a slope of zero. The figure above shows a horizontal line with a slope of zero.

Answer:

A linear function has a slope of zero. The figure above shows a horizontal line with a slope of zero.

Topic: Slope of a straight line
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix – Checkpoint 3
Status: Old
AACSB: Analytical thinking
17) What does the slope of the line shown in the above figure equal?

Answer: The slope equals the change in variable on the $y$-axis divided by the change in the variable on the $x$-axis, or $(150 - 300)/(600 - 800) = 0.75$.

*Topic: Slope of a straight line*

*Skill: Level 3: Using models*

*Section: Chapter 1 Appendix – Checkpoint 3*

*Status: Old*

*AACSB: Analytical thinking*
18) What does the slope of the line shown in the above figure equal?

Answer: The slope equals the change in variable on the $y$-axis divided by the change in the variable on the $x$-axis, or $(18 - 27)/(10 - 20) = 0.90$.

*Topic: Slope of a straight line*

*Skill: Level 3: Using models*

*Section: Chapter 1 Appendix – Checkpoint 3*

*Status: Old*

*AACSB: Analytical thinking*
19) What does the slope of the line shown in the above figure equal?

Answer: The slope equals the change in variable on the \( y \)-axis divided by the change in the variable on the \( x \)-axis, or \((30 - 60)/(25 - 15) = -3.0\).

\[ \text{Topic: Slope of a straight line} \]
\[ \text{Skill: Level 3: Using models} \]
\[ \text{Section: Chapter 1 Appendix - Checkpoint 3} \]
\[ \text{Status: Old} \]
\[ \text{AACSB: Analytical thinking} \]

20) What does the slope of the line shown in the above figure equal?

Answer: The slope equals the change in variable on the \( y \)-axis divided by the change in the variable on the \( x \)-axis, or \((5 - 10)/(60 - 100) = 0.125\).

\[ \text{Topic: Slope of a straight line} \]
\[ \text{Skill: Level 3: Using models} \]
\[ \text{Section: Chapter 1 Appendix - Checkpoint 3} \]
\[ \text{Status: Old} \]
\[ \text{AACSB: Analytical thinking} \]
21) What does the slope of the curved line at point A shown in the above figure equal?

Answer: The slope of a curved line equals the slope of a straight line that touches the curved line at only that point. And, the slope of a straight line equals the change in variable on the y-axis divided by the change in the variable on the x-axis. Measure the slope of the straight line from point A to where the line crosses the x-axis, at 15. Thus the straight line has a slope of \( \frac{30 - 0}{10 - 15} = -6 \). Therefore the curve line at point A also has a slope equal to -6.

Topic: Slope
Skill: Level 3: Using models
Section: Chapter 1 Appendix - Checkpoint 3
Status: Old
AACS: Analytical thinking

22) "It is impossible to represent a three variable relationship in a two-dimensional graph." Is this statement true or false? Explain your answer.

Answer: The statement is false because it is possible to represent a three variable relationship in a two dimensional graph. To do so, start by focusing on two of the variables. Assume that the third variable does not change (the *ceteris paribus* assumption) and then graph the relationship between the two variables. The graph shows how these two variables are related when the third variable does not change. When the third variable does change, then the entire relationship between the two graphed variables changes. In other words, the line showing the relationship between the two graphed variables shifts so that it becomes an entirely new line. The shift in the line shows how the third variable influences the other two.

Topic: Relationships among more than two variables
Skill: Level 2: Using definitions
Section: Chapter 1 Appendix - Checkpoint 4
Status: Old
AACS: Analytical thinking
23) Jamie is preparing to take his SAT tests. The table above shows how Jamie's score depends on the number of hours a week Jamie studies.

<table>
<thead>
<tr>
<th>Hours studied (per week)</th>
<th>SAT Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>900</td>
</tr>
<tr>
<td>4</td>
<td>1000</td>
</tr>
<tr>
<td>6</td>
<td>1050</td>
</tr>
<tr>
<td>8</td>
<td>1075</td>
</tr>
<tr>
<td>10</td>
<td>1090</td>
</tr>
</tbody>
</table>

   a. Plot the relationship in the figure, putting the hours studied on the horizontal axis.

   b. Is the relationship you plotted positive or negative?
   c. What happens to the slope of the relationship as hours studied increase?
   d. Suppose Jamie can enroll in an SAT prep course and, by so doing, for every possible number of hours he studies, his score will be 100 points higher. Plot the new relationship between the number of hours studied and Jamie's SAT score in the figure.
   e. How many variables are involved in the figure you just completed?

   Answer:

   a. The figure above plots the relationship between the number of hours Jamie studies
and his SAT score.
b. The relationship is positive: As Jamie increases the hours he studies, his SAT score increases.
c. The relationship is nonlinear, so the slope of the relationship changes as the number of hours studied changes. In the figure, the slope of the relationship decreases in size as the number of hours studied increases.
d. The figure above also plots the relationship between the hours Jamie studies and his SAT score if Jamie takes an SAT preparation course.
e. There are three variables: The number of hours Jamie studies, whether or not he takes an SAT preparation course, and his SAT score.

Topic: Relationships among more than two variables
Skill: Level 3: Using models
Section: Chapter 1 Appendix – Checkpoint 4
Status: Old
AACSB: Analytical thinking
2.1 What, How, and For Whom?

1) Items that are purchased by individuals for their own enjoyment are called
   A) consumption goods and services.
   B) capital goods.
   C) government goods and services.
   D) exports of goods and services.
   E) private goods.
Answer: A
Topic: Consumption goods and services
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSBI: Reflective thinking

2) Items bought by individuals to provide personal enjoyment are termed
   A) consumption goods.
   B) personal goods.
   C) consumption or investment goods.
   D) standard goods.
   E) pleasure goods.
Answer: A
Topic: Consumption goods and services
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSBI: Reflective thinking

3) What would be an example of a consumption good?
   A) Antonio, the manager of the local Taco Hut, purchases a new deep fryer.
   B) The local driver’s license office purchases a new digital camera and printer.
   C) Rhianna gets a haircut.
   D) Jake buys an iPhone.
   E) Donald Trump purchases furniture for his office.
Answer: D
Topic: What we produce
Skill: Level 2: Using definitions
Section: Checkpoint 2.1
Status: Old
AACSBI: Reflective thinking
4) Which of the following is a consumption good or service?
   A) a personal computer purchased in order to play games at home
   B) a United Airline ticket counter
   C) the Endeavor space shuttle
   D) a United Parcel Service truck delivering Christmas gifts
   E) a satellite dish installed by Cox Cable to download programs that are then distributed through its cable system

   Answer: A
   Topic: Consumption goods and services
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.1
   Status: Old
   AACSB: Reflective thinking

5) What would be an example of a consumption service?
   A) Rhianna gets a haircut.
   B) Jake buys an iPhone.
   C) Antoniö, the manager of the local Taco Hut, purchases a new deep fryer.
   D) The local driver’s license office purchases a new digital camera and printer.
   E) Donald Trump purchases furniture for his office.

   Answer: A
   Topic: Consumption goods and services
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.1
   Status: Old
   AACSB: Reflective thinking

6) The largest share of total production in the United States is
   A) consumption goods and services.
   B) capital goods.
   C) government goods and services.
   D) exported goods and services.
   E) imported goods and services.

   Answer: A
   Topic: Consumption goods and services
   Skill: Level 1: Definition
   Section: Checkpoint 2.1
   Status: Old
   AACSB: Reflective thinking
7) Items bought by businesses to help produce other goods and services are called
   A) consumption goods and services.
   B) capital goods.
   C) government goods and services.
   D) exports of goods and services.
   E) productive goods.
Answer: B
Topic: Capital goods
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking

8) Which of the following is NOT a consumption good?
   A) Nike swimming trunks
   B) marriage counseling services
   C) a UPS truck
   D) a Subway sandwich
   E) a U.S. government bond
Answer: C
Topic: Capital goods
Skill: Level 2: Using definitions
Section: Checkpoint 2.1
Status: New
AACSBS: Application of knowledge

9) An item that is purchased to increase businesses' productive resources is
   A) an export.
   B) a government good.
   C) a capital good.
   D) a consumption good.
   E) a productive good.
Answer: C
Topic: Capital goods
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking

10) What would be an example of capital good?
   A) Jeanette buys a new dress.
   B) The local driver's license office purchases a new digital camera and printer.
   C) Antonio, the manager of the local Taco Hut, purchases a new deep fryer.
   D) Apple sells computers to Japan.
   E) Rhianna gets a haircut.
Answer: C
Topic: Capital goods
Skill: Level 2: Using definitions
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking
11) The difference between consumption and capital goods is that
   A) only big corporations can afford capital goods.
   B) capital goods are used to produce additional goods while consumption goods are not.
   C) capital goods are provided by the government.
   D) consumption goods can be enjoyed by many people at the same time.
   E) it is illegal to export capital goods.

   Answer: B

12) Which of the following is NOT an example of a capital good?
   A) a miner’s cap
   B) a GPS tracking device
   C) an airport kiosk
   D) a U.S. government bond
   E) a stethoscope

   Answer: D

13) Goods and services bought by the government account for about ______ percent of total production.

   A) 2   B) 8   C) 17   D) 35   E) 67

   Answer: C

14) What would be an example of a government good?
   A) Jake buys an iPhone.
   B) The local driver’s license office purchases a new digital camera and printer.
   C) Antonio, the manager of the local Taco Hut, purchases a new deep fryer.
   D) Donald Trump purchases furniture for his office.
   E) Rhianna gets a haircut.

   Answer: B
15) Goods produced in the United States and sold in other countries are called
   A) exports.
   B) imports.
   C) foreign goods.
   D) capital goods.
   E) capital account goods.
Answer: A
Topic: Exports
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking

16) An export good is a good produced
   A) in the United States and sold to foreigners living in the United States.
   B) by foreigners in the United States and purchased by U.S. households.
   C) in another country and purchased by U.S. residents.
   D) in the United States and sold in other countries.
   E) in another country and purchased by foreigners not residing in the United States.
Answer: D
Topic: Exports
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking

17) Computers and insurance coverage produced in the United States and sold to people in other
   nations are categorized as
   A) U.S. consumption goods and services.
   B) foreign capital goods.
   C) U.S. government goods and services.
   D) U.S. exports of goods and services.
   E) U.S. imports of goods and services.
Answer: D
Topic: Exports
Skill: Level 2: Using definitions
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking
18) The Colorado Ski Shop sold 60 ski jackets to a Belgian company’s headquarters located in Paris, France. The ski jackets are a
   A) U.S. export good.
   B) capital good.
   C) government good.
   D) U.S. consumption service.
   E) U.S. import.
Answer: A

Topic: Exports
Skill: Level 2: Using definitions
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking

19) Over the past 70 years, which of the following has occurred?
   i. The service sector has grown so that now about 80 percent of workers are now employed in the service industry.
   ii. The manufacturing sector has shrunk, so now about 20 percent of workers are now employed in the production of goods.
   iii. The percentage of workers employed in the service industry has increased steadily.
      A) i, ii and iii
      B) i and iii
      C) ii only
      D) i only
      E) ii and iii
Answer: A

Topic: Changes in what we produce
Skill: Level 2: Using definitions
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking

20) Which of the following is NOT considered one of the factors of production?
   A) land
   B) labor
   C) capital
   D) technology
   E) entrepreneurship
Answer: D

Topic: Factors of production
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking
21) Which of the following correctly lists the categories of factors of production?
   A) land, labor, capital, and entrepreneurship
   B) land, buildings, capital, and entrepreneurship
   C) labor, machines, buildings, capital, and entrepreneurship
   D) forests, fish, buildings, capital, and entrepreneurship
   E) labor, money, stocks, and bonds

   Answer: A

22) Which of the following is NOT a factor of production?
   A) money
   B) capital
   C) land
   D) entrepreneurial ideas
   E) labor

   Answer: A

23) Goods and services are produced by using four factors of production:
   A) land, labor, capital, and entrepreneurship.
   B) land, labor, money, and equipment.
   C) natural resources, human resources, financial assets, and entrepreneurial resources.
   D) labor, human capital, physical capital, and financial capital.
   E) land, labor, capital, and money.

   Answer: A

24) Factors of production are the
   A) goods that are bought by individuals and used to provide personal enjoyment.
   B) goods that are bought by businesses to produce productive resources.
   C) productive resources used to produce goods and services.
   D) productive resources used by government to increase the productivity of consumption.
   E) goods and services produced by the economy.

   Answer: C
25) The productive resource that includes all the "gifts of nature" is called
   A) land.
   B) labor.
   C) capital.
   D) entrepreneurship.
   E) land if undeveloped and capital if developed.
   Answer: A
   Topic: Land
   Skill: Level 1: Definition
   Section: Checkpoint 2.1
   Status: Old
   AACS: Reflective thinking

26) Economists classify energy and water as part of which factor of production?
   A) land
   B) labor
   C) capital
   D) entrepreneurship
   E) land if undeveloped and capital if developed
   Answer: A
   Topic: Land
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.1
   Status: Old
   AACS: Reflective thinking

27) As a factor of production, oil reserves are counted as
   A) land.
   B) labor.
   C) capital.
   D) entrepreneurship.
   E) financial capital.
   Answer: A
   Topic: Land
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.1
   Status: Old
   AACS: Reflective thinking
28) Over time, the percentage of total employment in services has _______ and in agriculture, employment has _______.
   A) increased; increased
   B) decreased; increased
   C) stayed about the same; decreased
   D) stayed about the same; increased
   E) increased; decreased

Answer: E

Topic: Labor
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSB: Reflective thinking

29) Which of the following has been the largest contributor to increases in the quantity of labor in the United States during the past 50 years?
   A) The proportion of men taking paid jobs has increased.
   B) The proportion of women taking paid jobs has increased.
   C) The proportion of young adults entering college has decreased.
   D) The proportion of seniors taking early retirement has decreased.
   E) None of the above because the quantity of labor has actually decreased.

Answer: B

Topic: Labor
Skill: Level 2: Using definitions
Section: Checkpoint 2.1
Status: New
AACSB: Reflective thinking

30) The concept of human capital describes
   A) human skills, that is, the quality of labor.
   B) human population, that is, the quantity of labor.
   C) the number of machines per employed worker.
   D) the number of workers per operating machine.
   E) the number of machines (capital) that have been produced by people (humans).

Answer: A

Topic: Human capital
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSB: Reflective thinking
31) Which factor of production does human capital enhance?
   i.  land
   ii.  labor
   iii.  capital
   A) i only
   B) ii only
   C) iii only
   D) i and ii
   E) i, ii, and iii

Answer: B

32) Human capital can be increased through
   A) investment in new technology.
   B) education, on-the-job training, and work experience.
   C) investment in new machinery.
   D) decreases in population.
   E) increasing the nation's production of consumption goods.

Answer: B

33) The United States possesses a large amount of human capital. As a result of this fact, in the United States there is a
   A) large amount of machinery and equipment.
   B) large number of people and a great deal of land.
   C) highly skilled and educated labor force.
   D) large number of kind and generous humans.
   E) large amount of machinery (capital) that is run by people (humans).

Answer: C
34) Jan is attending college and studying to be an investment broker. To improve her chances of employment following college, she has interned at a top brokerage firm during the last two summers. Jan’s internship has increased her
   A) natural labor.
   B) human capital.
   C) consumption services.
   D) natural resources.
   E) entrepreneurship capital.
Answer: B
Topic: Labor, human capital
Skill: Level 4: Applying models
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking

35) Which of the following is NOT directly related to human capital?
   A) a college education
   B) a summer internship
   C) knowledge of computer programming
   D) an MRI machine
   E) an understanding of real estate markets
Answer: D
Topic: Human capital
Skill: Level 2: Using definitions
Section: Checkpoint 2.1
Status: New
AACSBS: Application of knowledge

36) Human capital ______ as you work. As a result, the ______ of goods and services ______.
   A) increases; quantity; increases.
   B) declines; quality; increases.
   C) improves; quality; does not change.
   D) does not change; quality; does not change.
   E) decreases; quantity; decreases.
Answer: A
Topic: Human capital
Skill: Level 2: Using definitions
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking
37) Capital, as a factor of production, refers to
   A) money, stocks, and bonds.
   B) the production technology used by firms.
   C) the tools and instruments used to produce other goods and services.
   D) the production factors imported from abroad.
   E) stocks and bonds, but not money.
Answer: C

38) The total value of capital in the United States is around
   A) $50 trillion.
   B) $10 trillion.
   C) $79 trillion.
   D) $100 trillion.
   E) $145 trillion.
Answer: A

39) Capital is a factor of production. Which of the following is an example of capital?
   i. $1,000 in money
   ii. 100 shares of Microsoft stock
   iii. $10,000 in bonds issued by General Motors
   iv. a drill press in your local machine shop
   A) i and ii       B) ii only       C) iii only       D) iv only       E) ii and iii
Answer: D

40) Capital is a factor of production. An example of capital as a factor of production is
   A) money.
   B) stocks.
   C) bonds.
   D) machines.
   E) education.
Answer: D
41) One of the productive resources is capital. Capital includes
   A) money borrowed from a bank.
   B) a company’s stocks and bonds.
   C) tools, buildings, and machine tools.
   D) toys, t-shirts, CD players, and pencils.
   E) money in a savings account at a bank.
Answer: C
Topic: Capital
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking

42) A newspaper printing press is an example of
   A) a capital good.
   B) a factor of production.
   C) something that influences labor productivity.
   D) a good that was once an output of the production process.
   E) All of the above are correct.
Answer: E
Topic: Capital
Skill: Level 2: Using definitions
Section: Checkpoint 2.1
Status: New
AACSBS: Application of knowledge

43) Which of the following is NOT considered capital?
   A) an assembly line at a General Motors plant
   B) a computer used by your instructor for presentations in class
   C) stocks and bonds that are sold by Pepsico
   D) the furniture in the President’s office
   E) a nail gun used for building houses
Answer: C
Topic: How do we produce?
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking

44) Entrepreneurship, as a factor of production, refers to
   A) the technology used by firms.
   B) the human capital accumulated by workers.
   C) the value of the firm’s stock.
   D) the human resource that organizes labor, land, and capital.
   E) the capital the firm uses.
Answer: D
Topic: Entrepreneurship
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking
45) The productive resource that organizes labor, land, and capital is
   A) human capital.
   B) financial capital.
   C) entrepreneurship.
   D) government.
   E) capital.
Answer: C
Topic: Entrepreneurship
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking

46) Payments to the factors of production are
   A) rent, mortgage, interest, and bonds.
   B) rent, interest, bonds, and profit or loss.
   C) rent, wages, interest, and profit or loss.
   D) rent, wages, profit or loss, and bonus.
   E) land, labor, capital, and entrepreneurship.
Answer: C
Topic: Resource payments
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking

47) ______ paid for the use of land; ______ paid for the services of labor; and ______ paid for the use of capital.
   A) Rent is; wages are; interest is
   B) Rent is; interest is; wages are
   C) Interest is; wages are; profit is
   D) Mortgages are; interest is; wages are
   E) Rent is; wages are; profit is
Answer: A
Topic: Resource payments
Skill: Level 2: Using definitions
Section: Checkpoint 2.1
Status: Old
AACSBS: Reflective thinking
48) The income paid for the use of land is called
   A) rent.
   B) wages.
   C) interest.
   D) profit.
   E) land capital.

   Answer: A
   Topic: Resource payments
   Skill: Level 1: Definition
   Section: Checkpoint 2.1
   Status: Old
   AACSB: Reflective thinking

49) The income paid to labor is called
   A) rent.
   B) wages.
   C) interest.
   D) profit.
   E) human capital.

   Answer: B
   Topic: Resource payments
   Skill: Level 1: Definition
   Section: Checkpoint 2.1
   Status: Old
   AACSB: Reflective thinking

50) Which factor of production is paid "interest"?
   A) land
   B) labor
   C) capital
   D) entrepreneurship
   E) human capital

   Answer: C
   Topic: Resource payments
   Skill: Level 1: Definition
   Section: Checkpoint 2.1
   Status: Old
   AACSB: Reflective thinking

51) The owners of the resource _______ are paid _______.
   A) land; wages
   B) labor; profit
   C) capital; rent
   D) capital; interest
   E) entrepreneurship; wages

   Answer: D
   Topic: Resource payments
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.1
   Status: Old
   AACSB: Reflective thinking
52) Which factor of production is paid "profit"?
   A) land
   B) labor
   C) capital
   D) entrepreneurship
   E) human capital

   Answer: D
   Topic: Resource payments
   Skill: Level 1: Definition
   Section: Checkpoint 2.1
   Status: Old
   AACS B: Reflective thinking

53) The functional distribution of income measures which of the following?
   A) how federal tax revenues are related to the business function that employs taxpayers
   B) the distribution of earnings by the factors of production
   C) the proportion of income generated by the four types of expenditures on goods and services
   D) the distribution of income among households
   E) the distribution of income among nations

   Answer: B
   Topic: Functional distribution of income
   Skill: Level 1: Definition
   Section: Checkpoint 2.1
   Status: Old
   AACS B: Reflective thinking

54) In the United States, the productive factor that, as a group, receives the largest fraction of the nation's total income is
   A) labor.
   B) capital.
   C) consumption goods and services.
   D) entrepreneurship.
   E) land.

   Answer: A
   Topic: Functional distribution of income
   Skill: Level 1: Definition
   Section: Checkpoint 2.1
   Status: Old
   AACS B: Reflective thinking
55) According to the functional distribution of income, in the United States,
   A) capital earns most of the income.
   B) labor earns most of the income.
   C) land earns most of the income.
   D) entrepreneurs earn most of the income.
   E) the income earned by capital and labor are approximately equal.

Answer: B

56) The data show that more than 60 percent of the total income earned in the United States goes to
   A) labor.
   B) land.
   C) capital.
   D) entrepreneurship.
   E) profit.

Answer: A

57) The majority of the income earned in the United States is paid in
   A) rent.
   B) wages.
   C) interest.
   D) profit.
   E) dividends.

Answer: B
58) The personal distribution of income measures which of the following?
   A) how federal tax revenues are related to the type of businesses that employs the taxpayers
   B) the distribution of earnings by the factors of production
   C) proportion of income generated by the four types of expenditures on goods and services
   D) the distribution of income among households
   E) the distribution of income among nations

Answer: D
Topic: Personal distribution of income
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACS: Reflective thinking

59) In the United States, the poorest 20 percent of households earn roughly _________ percent of total income.
   A) 20
   B) 10
   C) 15
   D) 3
   E) 0.5

Answer: D
Topic: Personal distribution of income
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACS: Reflective thinking

60) The personal distribution of income in the United States shows that
   A) income is equally distributed.
   B) the poorest 20 percent of individuals receive approximately 20 percent of total income.
   C) the richest 20 percent of individuals receive approximately 50 percent of total income.
   D) the poorest 60 percent of individuals receive approximately 50 percent of total income.
   E) the richest 20 percent of individuals receive approximately 25 percent of total income.

Answer: C
Topic: Personal distribution of income
Skill: Level 3: Using models
Section: Checkpoint 2.1
Status: Old
AACS: Reflective thinking

61) The richest 20 percent of individuals in the United States receive about _________ of the nation’s total income.
   A) 21 percent
   B) 51 percent
   C) 91 percent
   D) 99 percent
   E) 23 percent

Answer: B
Topic: Personal distribution of income
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACS: Reflective thinking
62) When the total U.S. production of goods and services is divided into consumption goods and services, capital goods, government goods and services, and export goods and services, the largest component is
   A) consumption goods and services.
   B) capital goods.
   C) government goods and services.
   D) export goods and services.
   E) capital goods and government goods and services tie for the largest component.

Answer: A

Topic: What we produce
Skill: Level 2: Using definitions
Section: Checkpoint 2.1
Status: Old
AACSB: Reflective thinking

63) An example of a capital good is
   A) a fiber optic cable TV system.
   B) an insurance policy.
   C) a haircut.
   D) an iPod.
   E) a slice of pizza.

Answer: A

Topic: What we produce
Skill: Level 2: Using definitions
Section: Checkpoint 2.1
Status: Old
AACSB: Reflective thinking

64) Goods and services produced in the United States and sold in other countries are called
   A) consumption goods and services.
   B) capital goods.
   C) government goods and services.
   D) export goods and services.
   E) import goods and services.

Answer: D

Topic: What we produce
Skill: Level 2: Using definitions
Section: Checkpoint 2.1
Status: Old
AACSB: Reflective thinking
65) Which of the following correctly lists the categories of factors of production?
   A) machines, buildings, land, and money
   B) hardware, software, land, and money
   C) capital, money, and labor
   D) owners, workers, and consumers
   E) land, labor, capital, and entrepreneurship

   Answer: E

66) In economics, the factor of production "land" includes all of the following EXCEPT
   A) energy.
   B) plastics.
   C) wild plants.
   D) animals, birds, and fish.
   E) oil.

   Answer: B

67) Human capital is
   A) solely the innate ability we are born with.
   B) the money humans have saved.
   C) the knowledge humans accumulate through education and experience.
   D) machinery that needs human supervision.
   E) any type of machinery.

   Answer: C

68) When Ethan continues his education beyond high school, he is increasing his
   A) capital.
   B) wage rate.
   C) human capital.
   D) quantity of labor.
   E) rent.

   Answer: C
69) ________ is the human resource that organizes labor, land, and capital.
   A) Human capital
   B) Human skill
   C) A gift of nature
   D) Entrepreneurship
   E) Profit

Answer: D

Topic: Entrepreneurship
Skill: Level 2: Using definitions
Section: Checkpoint 2.1
Status: Old
AACSB: Reflective thinking

70) Wages are paid to ________ and interest is paid to ________.
   A) entrepreneurs; capital
   B) labor; capital
   C) labor; land
   D) entrepreneurs; land
   E) labor; entrepreneurs

Answer: B

Topic: Payments for the factors of production
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSB: Reflective thinking

71) The income earned by entrepreneurs is
   A) interest.
   B) wages.
   C) profit or loss.
   D) rent, wages, and interest.
   E) a mixture of rent, wages, interest, and profit.

Answer: C

Topic: Profit
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSB: Reflective thinking

72) Dividing the nation’s income among the factors of production, the largest percentage is paid to
   A) labor.
   B) land.
   C) capital.
   D) entrepreneurship.
   E) labor and capital, with each receiving about 41 percent of the total income.

Answer: A

Topic: Functional distribution of income
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSB: Reflective thinking
73) _______ earned the highest amount of income among the factors of production in the United States.
   A) Labor  
   B) Capital  
   C) Land  
   D) Entrepreneurship  
   E) Investment  

Answer: A  
Topic: Functional distribution of income  
Skill: Level 1: Definition  
Section: Checkpoint 2.1  
Status: Old  
AACSBS: Reflective thinking

74) In the United States, the richest 20 percent of households receive about _______ percent of total income.
   A) 4  
   B) 15  
   C) 23  
   D) 50  
   E) 33

Answer: D  
Topic: Personal distribution of income  
Skill: Level 1: Definition  
Section: Checkpoint 2.1  
Status: Old  
AACSBS: Reflective thinking

75) In the United States, the poorest 20 percent of households receive about _______ percent of total income.
   A) 3  
   B) 15  
   C) 23  
   D) 49  
   E) 20

Answer: A  
Topic: Personal distribution of income  
Skill: Level 1: Definition  
Section: Checkpoint 2.1  
Status: Old  
AACSBS: Reflective thinking

76) The personal distribution of income shows
   A) that labor receives the largest percentage of total income.  
   B) how profit accounts for the largest fraction of total income.  
   C) that the richest 20 percent of households receive 23 percent of total income.  
   D) that interest accounts for most of the income of the richest 20 percent of households.  
   E) that the poorest 20 percent of households receive less than 4 percent of total income.

Answer: E  
Topic: Personal distribution of income  
Skill: Level 1: Definition  
Section: Checkpoint 2.1  
Status: Old  
AACSBS: Reflective thinking
2.2 The Global Economy

1) Compared to the world, the rate of U.S. population growth is
   A) slower than in the world as a whole.
   B) about the same as in the world as a whole.
   C) much faster than in the world as a whole.
   D) incomparable because U.S. residents are born with a much greater chance of
      accumulating a lot of human capital.
   E) incomparable because we do not have accurate world population statistics.

   Answer: A

   Topic: World population
   Skill: Level 1: Definition
   Section: Checkpoint 2.2
   Status: Old
   AACSBS: Reflective thinking

2) Approximately _______ people live in the United States and ______ people live in the
    world.
   A) 410 million; 8 billion
   B) 310 million; 7 billion
   C) 210 million; 5 billion
   D) 310 million; 3 billion
   E) 210 million; 6 billion

   Answer: B

   Topic: The people
   Skill: Level 1: Definition
   Section: Checkpoint 2.2
   Status: Old
   AACSBS: Reflective thinking

3) The most people live in ______ economies and the fewest people live in ______ economies.
   A) developing; emerging market
   B) advanced; emerging market
   C) advanced; developing
   D) emerging market; developing
   E) developing; advanced

   Answer: A

   Topic: The countries
   Skill: Level 1: Definition
   Section: Checkpoint 2.2
   Status: Old
   AACSBS: Reflective thinking
4) When describing the IMF broad country classification, the most accurate statement is that
   A) the category with the greatest number of countries is the advanced economies.
   B) the emerging market economies are countries that were, until the early 1990s, part of the
      Soviet Union or its satellites.
   C) most of the nations in Western Europe are considered emerging market economies.
   D) most of the world’s population lives in advanced economies.
   E) about 50 percent of the world’s population live in the advanced economies and the other
      50 percent live in the emerging market and developing economies.

Answer: B

Topic: Classification of economies
Skill: Level 1: Definition
Section: Checkpoint 2.2
Status: Old
AACSB: Reflective thinking

5) Which of the following is NOT classified as an advanced economy?
   A) South Korea
   B) Australia
   C) Russia
   D) Hong Kong
   E) the United Kingdom

Answer: C

Topic: Advanced economies
Skill: Level 2: Using definitions
Section: Checkpoint 2.2
Status: Old
AACSB: Reflective thinking

6) Canada is classified by the International Monetary Fund as
   A) an advanced economy.
   B) a developing economy.
   C) a transition economy.
   D) an emerging market economy.
   E) a natural-resource based economy.

Answer: A

Topic: Advanced economies
Skill: Level 2: Using definitions
Section: Checkpoint 2.2
Status: Old
AACSB: Reflective thinking
7) _______ economies include _______.
   A) Advanced; France, Australia and South Korea
   B) Advanced; the United States, Taiwan and Russia
   C) Advanced; Russia, Canada and Singapore
   D) Emerging; Taiwan, Russia and Singapore
   E) Emerging; Saudi Arabia, Poland and Taiwan

Answer: A

Topic: Advanced economies
Skill: Level 2: Using definitions
Section: Checkpoint 2.2
Status: Old
AACSB: Reflective thinking

8) Most countries in the world are classified as
   A) advanced.
   B) in transition.
   C) developing.
   D) industrialized.
   E) emerging market.

Answer: C

Topic: Developing economies
Skill: Level 1: Definition
Section: Checkpoint 2.2
Status: Old
AACSB: Reflective thinking

9) Most of the world’s population lives in
   A) advanced economies.
   B) developing economies.
   C) transition economies.
   D) emerging market economies.
   E) island nations.

Answer: B

Topic: Developing economies
Skill: Level 1: Definition
Section: Checkpoint 2.2
Status: Old
AACSB: Reflective thinking
10) Which of the following is true?
   i. The advanced economies account for more than half of global production.
   ii. Almost four out of every five people in the world live in the developing economies.
   iii. In the advanced economies, agriculture accounts for a larger part of total production than in the developing economies.
      A) Only i and ii  
      B) Only ii and iii  
      C) Only i and iii  
      D) Only i  
      E) i, ii, and iii

Answer: A

11) Nigeria would be classified by the International Monetary Fund as
   A) an advanced economy.  
   B) a developing economy.  
   C) a transition economy.  
   D) an emerging market economy.  
   E) a resource-based economy.

Answer: B

12) _______ economies include ________.
    A) Developing; Saudi Arabia and South Africa  
    B) Developing; Poland and Russia  
    C) Developing; China and Poland  
    D) Emerging; Poland and Brazil  
    E) Emerging; China and Canada

Answer: A

Topic: Developing economies
Skill: Level 1: Definition
Section: Checkpoint 2.2
Status: Old
AACSB: Reflective thinking

Topic: Developing economies
Skill: Level 2: Using definitions
Section: Checkpoint 2.2
Status: Old
AACSB: Reflective thinking
13) Poland is classified as
   A) an advanced economy.
   B) a developing economy.
   C) a transition economy.
   D) an emerging market economy.
   E) private economy.
Answer: D

14) The majority of the value of production in the world economy is produced in
   A) all of the developing economies taken together.
   B) all of Africa and the Middle East taken together.
   C) China and other Asian developing economies.
   D) all of the advanced economies taken together.
   E) all of the emerging market economies taken together.
Answer: D

15) Which of the following correctly describes how the "global pie is baked"?
   A) Advanced economies account for about 50 percent of the value of the world’s production.
   B) The United States’ share of economic pie is increasing while China’s share is decreasing.
   C) The increase in manufacturing has taken place in mainly the advanced economies.
   D) Asia accounts for about 40 percent of the global pie.
   E) Emerging economies account for about 25 percent of the global pie.
Answer: A

16) Physical capital differences across countries can be seen in the fact that
   A) more advanced economies typically have more sophisticated technology.
   B) furniture factories in China use machines like those in North Carolina.
   C) students in India study the same subjects as those in the United States.
   D) advanced economies produce 53 percent of the world’s income.
   E) the iPhone’s components are produced in 30 countries.
Answer: A
17) The charitable organization Creating Hope International trains women in Afghanistan to become tailors. This effort reduces
   A) physical capital differences between advanced and developing economies.
   B) entrepreneurship differences between advanced and developing economies.
   C) agricultural differences between advanced and developing economies.
   D) manufacturing differences between advanced and developing economies.
   E) human capital differences between advanced and developing economies.

   Answer: E

   Topic: How in the global economy
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.2
   Status: Old
   AACSB: Reflective thinking

18) Which of the following is an example of an effort to decrease physical capital differences between an advanced and a developing economy?
   A) American troops build roads in Afghanistan.
   B) Through World Vision, women and children in Africa receive education.
   C) Peace Corps volunteers teach English around the world.
   D) Creating Hope International trains women in Afghanistan to become tailors.
   E) Habitat for Humanity builds houses for low income families in the United States.

   Answer: A

   Topic: How in the global economy
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.2
   Status: Old
   AACSB: Reflective thinking

19) Of the following, the country with the highest average income per day in the world is
   A) Japan.
   B) the United States.
   C) France.
   D) Germany.
   E) China.

   Answer: B

   Topic: Income in the global economy
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.2
   Status: Old
   AACSB: Reflective thinking
20) Income equality has
   A) increased within countries but has narrowed across countries.
   B) not changed in the advanced economies over the past 50 years.
   C) narrowed within countries but increased across countries.
   D) increased in developing economies as manufacturing has decreased.
   E) decreased in the United States as manufacturing has increased.

   Answer: A
   Topic: Income in the global economy
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.2
   Status: Old
   AACSB: Reflective thinking

21) The world population is approximately _______ people.
    A) 6.8 million
    B) 2 trillion
    C) 6.8 billion
    D) 6.8 trillion
    E) 680 million

   Answer: C
   Topic: Population
   Skill: Level 1: Definition
   Section: Checkpoint 2.2
   Status: Old
   AACSB: Reflective thinking

22) Which of the following statements is true?
    A) Income inequality within most countries has increased during the past 20 years.
    B) Income inequality across the entire world has decreased during the past 20 years.
    C) Income inequality within most countries and across the entire world has not changed much during the past 20 years.
    D) Both A and B are correct.
    E) None of the above is correct.

   Answer: D
   Topic: Income in the global economy
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.2
   Status: New
   AACSB: Reflective thinking
23) The percentage of the world’s population that lives in the advanced economies is
   A) more than 71 percent.
   B) between 51 percent and 70 percent.
   C) between 31 percent and 50 percent.
   D) between 20 percent and 30 percent.
   E) less than 20 percent.

   Answer: E

   Topic: Population
   Skill: Level 1: Definition
   Section: Checkpoint 2.2
   Status: Old
   AACSB: Reflective thinking

24) Which of following groups of countries are all advanced economies?
   A) Australia, Brazil, and the United States
   B) Hong Kong, Japan, France, and the United Kingdom
   C) Italy, the United States, China, and Russia
   D) Singapore, Russia, France, and Chad
   E) Mexico, Canada, Germany, and Egypt

   Answer: B

   Topic: Advanced economies
   Skill: Level 1: Definition
   Section: Checkpoint 2.2
   Status: Old
   AACSB: Reflective thinking

25) The emerging market economies are
   A) the largest grouping including the nations of China and India.
   B) in transition from state-owned production to free markets.
   C) most of the nations of Western Europe.
   D) the nations that are currently agricultural in nature.
   E) the nations with the highest standards of living.

   Answer: B

   Topic: Emerging market economies
   Skill: Level 1: Definition
   Section: Checkpoint 2.2
   Status: Old
   AACSB: Reflective thinking

26) As a percentage of total world production, production in the 29 advanced economies is about
   _______ percent of total world production and in the 118 developing economies is about
   _______ percent of total world production.
   A) 53; 39
   B) 23; 62
   C) 53; 12
   D) 30; 46
   E) 19; 73

   Answer: A

   Topic: Advanced economies
   Skill: Level 1: Definition
   Section: Checkpoint 2.2
   Status: Old
   AACSB: Reflective thinking
27) Compared to the developing economies, the advanced economies have ________ human capital and ________ physical capital.
   A) more; more
   B) more; less
   C) the same; the same
   D) less; more
   E) less; less

Answer: A

Topic: Advanced economies
Skill: Level 1: Definition
Section: Checkpoint 2.2
Status: Old
AACS: Reflective thinking

28) In the advanced economies, ________ of the factories use advanced capital equipment, and in the developing economies, ________ of the factories use advanced capital equipment.
   A) virtually all; virtually all
   B) some; some
   C) virtually all; none
   D) some; none of
   E) virtually all; some

Answer: E

Topic: Advanced economies
Skill: Level 1: Definition
Section: Checkpoint 2.2
Status: Old
AACS: Reflective thinking

29) Among the United States, Canada, Russia, India, and the United Kingdom, the country with the highest average income per person is
   A) the United States.
   B) Russia.
   C) India.
   D) Canada.
   E) the United Kingdom.

Answer: A

Topic: Advanced economies
Skill: Level 1: Definition
Section: Checkpoint 2.2
Status: Old
AACS: Reflective thinking
2.3 The Circular Flows

1) _______ the owners of the factors of production, while _______ what amounts of those factors to hire.
   A) Households are; firms determine
   B) Households are; the government determines
   C) The government is; firms determine
   D) Firms are; households determine
   E) Firms are; the government determines

Answer: A

Topic: Households vs. firms
Skill: Level 1: Definition
Section: Checkpoint 2.3
Status: Old
AACSB: Reflective thinking

2) What two groups of decision makers are represented in the basic circular flow model?
   A) governments and financial institutions
   B) lenders and borrowers
   C) wholesalers and retailers
   D) bankers and regulators
   E) households and firms

Answer: E

Topic: Circular flow
Skill: Level 1: Definition
Section: Checkpoint 2.3
Status: New
AACSB: Reflective thinking

3) Dan missed class the day the professor covered the circular flow model. Dan asked his friend Joan to explain markets to him. Joan correctly stated that a market
   A) requires a physical location for buyers and sellers to get together.
   B) is any arrangement that brings buyers and sellers together.
   C) must include a written contract between buyers and sellers.
   D) is only a place to purchase groceries.
   E) must have many buyers and only one seller, who is willing to sell to all the buyers.

Answer: B

Topic: Markets
Skill: Level 2: Using definitions
Section: Checkpoint 2.3
Status: Old
AACSB: Reflective thinking
4) The decisions of firms and households are
   A) coordinated by markets.
   B) made independently of one another.
   C) controlled by but not totally coordinated by the government.
   D) unexplainable by the circular flow model.
   E) coordinated by but not totally controlled by the government.

   Answer: A
   Topic: Markets
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACS: Reflective thinking

5) The circular flow model is used to show the
   A) flow of renewable natural resources.
   B) recycling process of production materials.
   C) expansions and contractions of economic activity.
   D) flow of expenditures and incomes in the economy.
   E) flow of supply and the flow of demand.

   Answer: D
   Topic: Circular flow model
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACS: Reflective thinking

6) The circular flow model shows the
   A) distribution of income and consumption goods across income levels.
   B) combinations of the factors of production needed to produce goods and services.
   C) flow of expenditure and incomes that arise from the households’, firms’, and governments’ decisions.
   D) flow of natural resources from firms to the private market to government and back to firms.
   E) distribution of income to the different factors of production.

   Answer: C
   Topic: Circular flow model
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACS: Reflective thinking
7) The circular flow model shows the flow of
   A) expenditure and income throughout the economy.
   B) only money throughout the economy.
   C) only funds in stock and bond markets.
   D) only tax payments and government expenditures.
   E) goods markets and factor markets as they move through the economy.
Answer: A

8) In the circular flow model, there are two types of markets: the _______ market and the _______ market.
   A) producers; consumers
   B) households; firms
   C) service; goods
   D) goods; factor
   E) supply; demand
Answer: D

9) In the circular flow model, consumption goods are bought and sold in the
   A) goods market.
   B) financial market.
   C) factor markets.
   D) government market.
   E) monetary flows.
Answer: A

10) In the circular flow model, which of the following is on the buying side in the goods market?
    i. firms
    ii. households
    iii. federal, state, and local governments
    A) i only    B) ii only    C) iii only    D) i and ii    E) ii and iii
Answer: E
11) In the circular flow model, which of the following is on the selling side in the goods market?
   A) federal, state, and local governments
   B) only households
   C) exporters
   D) only firms
   E) both firms and households

   Answer: D

12) The circular flow model shows that goods and services flow from
    A) businesses to households.
    B) households to business.
    C) the factor market to businesses.
    D) the goods market to businesses.
    E) the factor markets to the goods markets.

   Answer: A

13) As the circular flow model points out, a choice that households make is how
    A) many resources a firm will hire.
    B) many goods and services are produced.
    C) many goods and services are purchased.
    D) much labor is hired.
    E) much the government will collect in taxes and how much the government will spend on transfer payments.

   Answer: C
14) In the circular flow model, which of the following owns the factors of production?
   A) only federal, state, and local governments
   B) only households
   C) only firms
   D) both firms and households
   E) firms, households, and all levels of government

Answer: B

Topic: Circular flow model
Skill: Level 1: Definition
Section: Checkpoint 2.3
Status: Old
AACSB: Reflective thinking

15) In the circular flow model, the factor markets are the markets in which
   A) consumption goods and services are bought and sold.
   B) government goods and services are provided.
   C) land, labor, capital, and entrepreneurship are bought and sold.
   D) investment goods and services are bought and sold.
   E) governments impose all their taxes.

Answer: C

Topic: Circular flow model
Skill: Level 1: Definition
Section: Checkpoint 2.3
Status: Old
AACSB: Reflective thinking

16) A money flow in the circular flow diagram is
   i. the government's collection of taxes.
   ii. Chevrolet's production of SUVs.
   iii. Nike's payment of wages to its workers.

   A) i and iii
   B) i, ii and iii
   C) i only
   D) ii only
   E) ii and iii

Answer: A

Topic: Circular flow model
Skill: Level 2: Using definitions
Section: Checkpoint 2.3
Status: Old
AACSB: Reflective thinking
17) A real flow in the circular flow diagram is
   i. a firm's payments of wages to its workers.
   ii. a household's purchase of a new car.
   iii. a farmer's use of land to grow corn.
   
   A) ii and iii  
   B) i only  
   C) i and iii  
   D) ii only  
   E) i, ii and iii  
   
   Answer: A
   
Topic: Circular flow model  
Skill: Level 2: Using definitions  
Section: Checkpoint 2.3  
Status: Old  
AACSB: Reflective thinking  

18) An example of a real flow in the circular flow diagram is
   A) a household's supply of work effort at its new business.  
   B) the government's payment of wages to a soldier.  
   C) Nike's payment of wages to workers in China.  
   D) your county's collection of property taxes.  
   E) a teacher's salary at the local high school.  
   
   Answer: A
   
Topic: Circular flow model  
Skill: Level 2: Using definitions  
Section: Checkpoint 2.3  
Status: Old  
AACSB: Reflective thinking  

19) An example of a money flow in the circular flow diagram is
   A) a student's payment of tuition to her university.  
   B) the government's operation of the court system.  
   C) the government's financing of the national debt.  
   D) a firm's production of goods to sell to a foreign country.  
   E) a farmer's use of land to grow wheat.  
   
   Answer: A
   
Topic: Circular flow model  
Skill: Level 2: Using definitions  
Section: Checkpoint 2.3  
Status: Old  
AACSB: Reflective thinking
20) As the circular flow model shows, the factors of production flow from
   A) firms to households through the factor market.
   B) households to firms through the factor market.
   C) firms to households through the goods market.
   D) households to firms through the goods market.
   E) the goods market through firms to the factor markets.
   Answer: B
   Topic: Circular flow model
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

21) In the circular flow model, the factors of production flow in the
   A) same direction as do the rents, wages, interest, and profits.
   B) opposite direction as do the rents, wages, interest, and profits.
   C) opposite direction as does the government.
   D) same direction as does the goods market.
   E) opposite direction as does the goods market.
   Answer: B
   Topic: Circular flow model
   Skill: Level 4: Applying models
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

22) In the goods market, firms _______ and households _______.
   A) purchase goods and services; supply goods and services
   B) supply land, labor, capital, and entrepreneurship services; hire land, labor, capital, and entrepreneurship services
   C) pay rent, wages, interest, and profit; earn rent, wages, interest, and profit
   D) supply goods and services; purchase goods and services
   E) hire land, labor, capital, and entrepreneurship services; supply goods and services
   Answer: D
   Topic: Circular flow model
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking
23) In the factor market, firms ________ and households ________.
   A) hire land, labor, capital, and entrepreneurship services; purchase goods and services
   B) supply land, labor, capital, and entrepreneurship services; hire land, labor, capital, and entrepreneurship services
   C) pay rent, wages, interest, and profit; earn rent, wages, interest, and profit
   D) purchase goods and services; supply goods and services
   E) supply goods and services; purchase goods and services

Answer: C

Topic: Circular flow model
Skill: Level 1: Definition
Section: Checkpoint 2.3
Status: Old
AACSB: Reflective thinking

24) Which of the following transactions takes place in factor markets?
   A) Henry receives a commission from his employer for selling a new automobile.
   B) Jake purchases 1,000 shares of stock in the Wal-Mart Corporation through his online trading account.
   C) Sam enters the winning bid on a grand piano at a local auction.
   D) Justin receives $30 in exchange for mowing his neighbor’s lawn.
   E) Lucille receives a $500 check from the U.S. Social Security Administration.

Answer: A

Topic: Circular flow model
Skill: Level 2: Using definitions
Section: Checkpoint 2.3
Status: New
AACSB: Application of knowledge

25) Which markets are depicted in the basic circular flow model?
   A) the goods market and the stock market
   B) the factor market and the bond market
   C) the goods market and the factor market
   D) the money market and the foreign exchange market
   E) the stock market and the bond market

Answer: C

Topic: Circular flow model
Skill: Level 1: Definition
Section: Checkpoint 2.3
Status: New
AACSB: Reflective thinking
26) In the circular flow model, which of the following flows in the opposite direction from the flow of factors of production?
   A) finished goods and services  
   B) wages, rent, interest, and profit  
   C) interests payments of Federal, state, and local governments  
   D) firm's profit incentives  
   E) the goods market

Answer: B

Topic: Circular flow model
Skill: Level 1: Definition
Section: Checkpoint 2.3
Status: Old
AACSB: Reflective thinking

27) Terri is enrolled in her first economics course. She is required to give a presentation about the circular flow. Which of the following statements should she include in her presentation?
   A) Households choose the amount of the factors of production to provide the firms.  
   B) Firms choose the amount of the factors of production to provide households.  
   C) Households receive wages for the amount of entrepreneurship they provide firms.  
   D) Firms pay wages for the amount of entrepreneurship they provide households.  
   E) The flows of goods and services and payments for the goods and services flow in the same direction.

Answer: A

Topic: Circular flow model
Skill: Level 2: Using definitions
Section: Checkpoint 2.3
Status: Old
AACSB: Reflective thinking

28) Aaron locked himself out of his house and had to pay $40 to Brianna, who works for Lucky Locksmith, to open his door. Based on this transaction in the economy and using concepts from the circular flow model, which of the following is true?
   A) Brianna earned income from supplying her labor services.  
   B) Aaron earned income from supplying his labor services.  
   C) Brianna purchased goods and services.  
   D) Aaron acted as a firm in this transaction.  
   E) Aaron supplied goods and services.

Answer: A

Topic: Circular flow model
Skill: Level 2: Using definitions
Section: Checkpoint 2.3
Status: Old
AACSB: Reflective thinking
29) In the circular flow model,
   A) the government is represented as a separate market.
   B) the government buys goods and services from firms.
   C) goods and services are sold by households and purchased by firms.
   D) factor markets are where goods rather than services are bought and sold.
   E) the government has no direct interaction with either households or firms.

   Answer: B

   Topic: Circular flow and the government
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

30) In the circular flow model with the government sector, transfers
   A) flow in the same direction as do taxes.
   B) flow in the opposite direction as do taxes.
   C) to households flow in the same direction as do expenditures on goods and services.
   D) to firms flow in the same direction as do rent, wages, interest, and profits.
   E) flow only through the goods market.

   Answer: B

   Topic: Circular flow and the government
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

31) In the circular flow model with the government sector, taxes
   A) flow in the opposite direction as do transfers.
   B) flow in the same direction as do transfers.
   C) on households flow in the same direction as do the goods and services.
   D) on firms flow in the same direction as do factors of production.
   E) flow from the goods market to the factor markets.

   Answer: A

   Topic: Circular flow and the government
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

32) Which of the following is NOT shown explicitly in the circular flow model?
   A) the government’s purchases in the goods market
   B) the taxes the government collects from households
   C) the government’s interaction with firms
   D) the legal system
   E) the transfers the government makes to households

   Answer: D

   Topic: Circular flow and the government
   Skill: Level 3: Using models
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking
33) Which of the following is a function of the U.S. federal government?
   A) providing the legal and social framework for economic activity
   B) distributing private goods and services
   C) deciding for whom firms should produce goods and services
   D) deciding how much to produce of private goods and services
   E) determining what wages firms will pay their workers.

   Answer: A
   Topic: Federal government
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

34) Which of the following is NOT a function of the federal government?
   A) collecting property taxes
   B) making social security and welfare payments
   C) making transfers to state and local governments
   D) providing public goods and services
   E) imposing a personal income tax

   Answer: A
   Topic: Functions of the federal government
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

35) Of the following, the largest single component of U.S. federal government expenditures is spent on
   A) interest paid on the national debt.
   B) Medicare and Medicaid.
   C) national defense.
   D) purchases of goods and services for purposes other than national defense.
   E) transfers to state and local governments.

   Answer: B
   Topic: Federal government
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking
36) The largest component of federal government spending is for
   A) national defense.
   B) Medicare and Medicaid.
   C) education.
   D) prisons.
   E) interest on the national debt.
   Answer: B
   Topic: Federal government
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

37) Of the following, the federal government obtains most revenue from
   A) excise taxes.
   B) sales taxes.
   C) corporate income taxes.
   D) Social Security taxes.
   E) property taxes.
   Answer: D
   Topic: Federal government
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

38) The two biggest items of the U.S. federal government revenue that together account for over approximately 80 percent of total federal government revenue are
   A) personal income taxes and Social Security taxes.
   B) personal income taxes and corporate income taxes.
   C) corporate income taxes and Social Security taxes.
   D) corporate income taxes and property taxes.
   E) personal income taxes and sales taxes.
   Answer: A
   Topic: Federal government
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking
39) Of the following, the federal government’s largest source of revenue is the
   A) sales tax.
   B) property tax.
   C) corporate income tax.
   D) social security tax.
   E) transfers from state and local governments.

   Answer: D
   Topic: Federal government
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACS: Reflective thinking

40) Tax revenues are transferred from
   A) state governments to the federal government.
   B) local governments to state and federal governments.
   C) one state government to other state governments.
   D) the federal government to state and local governments.
   E) the state and local governments to the federal government.

   Answer: D
   Topic: Federal government
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.3
   Status: Old
   AACS: Reflective thinking

41) Of the following, the largest source of revenue for the federal government is the
   A) personal income tax.
   B) transfers from state and local governments.
   C) corporation income tax.
   D) lottery.
   E) revenue from the sale of public lands.

   Answer: A
   Topic: Federal government
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACS: Reflective thinking

42) Income taxes paid by corporations are
   A) the major source of revenue for the federal government.
   B) the major source of revenue for state governments.
   C) the major source of revenue for local governments.
   D) about 9 percent of the federal government’s revenue.
   E) the major source of expenditure by the federal government.

   Answer: D
   Topic: Federal government
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.3
   Status: Old
   AACS: Reflective thinking
43) The national debt is the total amount the _______ government has borrowed to make expenditures that _______ tax revenue.
   A) state and local; are less than
   B) federal; are less than
   C) federal; exceed
   D) state and local; exceed
   E) federal; are equal to

Answer: C
Topic: National debt
Skill: Level 1: Definition
Section: Checkpoint 2.3
Status: Old
AACSBB: Reflective thinking

44) The national debt is the total amount the _______ government has _______ to make expenditures that exceed tax revenue.
   A) state and local; borrowed
   B) federal; taxed U.S. citizens
   C) state and local; taxed U.S. citizens
   D) federal; borrowed
   E) federal; loaned

Answer: D
Topic: National debt
Skill: Level 1: Definition
Section: Checkpoint 2.3
Status: Old
AACSBB: Reflective thinking

45) The total amount the federal government has borrowed to make expenditures that exceed tax revenue is called
   A) personal income taxes.
   B) federal expenditures.
   C) total government spending.
   D) the net government revenue.
   E) the national debt.

Answer: E
Topic: National debt
Skill: Level 1: Definition
Section: Checkpoint 2.3
Status: Old
AACSBB: Reflective thinking
46) If there is a national debt, we can conclude that the federal government has
   A) borrowed in the past.
   B) purchased more goods and services than were needed.
   C) spent money foolishly.
   D) loaned funds to U.S. taxpayers in the past.
   E) loaned funds to other nations in the past.

   Answer: A

   Topic: National debt
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

47) State and local governments finance expenditures mainly from
   A) tax revenue.
   B) funds provided by the federal government.
   C) government bonds issued at the state level.
   D) private bank loans.
   E) lottery funds.

   Answer: A

   Topic: State and local governments
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

48) Of the following, the largest source of tax revenue collected by state and local governments comes from
   A) individual income taxes.
   B) corporate income taxes.
   C) death taxes.
   D) sales taxes.
   E) lottery revenues.

   Answer: D

   Topic: State and local governments
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking
49) Which of the following are sources of revenue for state and local governments?
   i. property taxes
   ii. sales taxes
   iii. transfers from the federal government
   A) i and ii
   B) ii and iii
   C) i and iii
   D) i, ii and iii
   E) i only
   Answer: D
   
   Topic: State and local governments
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

50) Property taxes are a major source of revenue for
   A) state and local governments.
   B) the federal governments.
   C) the federal, state, and local governments.
   D) firms wanting to relocate their operations.
   E) consumers.
   Answer: A
   
   Topic: State and local governments
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

51) The largest category of state and local government expenditures is
   A) public welfare.
   B) highways.
   C) education.
   D) interest on their debt.
   E) social security.
   Answer: C
   
   Topic: State and local governments
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking
52) State and local governments spend about _______ of their expenditures on education.
   A) 14 percent
   B) 19 percent
   C) 34 percent
   D) 59 percent
   E) 74 percent
Answer: C

53) Households and firms in the U.S. economy interact with those in the rest of the world in the _______ market and in the _______ market.
   A) goods; factor
   B) goods; financial
   C) government; goods
   D) financial; factor
   E) firm; government
Answer: B

54) An example of a U.S. export is
   A) a TV made in China sold to a buyer in Azerbaijan.
   B) matchbooks made in Mexico sold to a buyer in New Jersey.
   C) pasta made in Italy sold to buyers in Spain.
   D) diamonds mined in Africa sold to buyers in South America.
   E) a washing machine made in Indiana sold to a buyer in France.
Answer: E
55) Within the circular flow model, economists define households as
   A) families with at least 2 children.
   B) families living in their own houses.
   C) individuals or groups living together.
   D) married or engaged couples.
   E) individuals or groups within the same legally defined family.

Answer: C

56) A market is defined as
   A) the physical place where goods (but not services) are sold.
   B) the physical place where goods and services are sold.
   C) any arrangement that brings buyers and sellers together.
   D) a place where money is exchanged for goods.
   E) another name for a store.

Answer: C

57) In the circular flow model,
   A) only firms sell in markets.
   B) only households buy from markets.
   C) some firms only sell and some firms only buy.
   D) the money used to buy goods and the goods themselves travel in the same direction.
   E) both firms and households buy or sell in different markets.

Answer: E
58) ________ choose(s) the quantities of goods and services to produce, while ________ choose(s) the quantities of goods and services to buy
   A) Households; firms
   B) Firms; households and the government
   C) The government; firms
   D) Firms; only households
   E) Households; the government
   Answer: B
   Topic: Households vs. firms
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

59) ________ choose the quantities of factors of production to hire and ________ choose the quantities of goods and services to produce.
   A) Entrepreneurs; firms
   B) Firms; firms
   C) Markets; markets
   D) Factor markets; goods markets
   E) Firms; households
   Answer: B
   Topic: Households vs. firms
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

60) In the circular flow model, rent, wages, interest, and profit paid flow from ________ through ________ to ________.
   A) households; goods markets; firms as payment for goods
   B) firms; factor markets; households
   C) firms; goods markets; households
   D) households; factor markets; firms
   E) firms; goods markets; firms
   Answer: B
   Topic: Households vs. firms
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking
61) A circular flow model shows the interrelationship between the _______ markets and the _______ markets.
   A) household; goods
   B) household; factor
   C) business; household
   D) expenditure; income
   E) goods; factor
   Answer: E
   Topic: Circular flow model
   Skill: Level 3: Using models
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

62) In the circular flow model, the expenditures on goods and services flow in the
   A) same direction as goods and services in all cases.
   B) same direction as goods and services only if they both flow through the goods market.
   C) same direction as goods and services only if they both flow through the factor market.
   D) opposite direction as goods and services.
   E) same direction as factor markets.
   Answer: D
   Topic: Circular flow model
   Skill: Level 3: Using models
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking

63) Households receive transfers from _______, and firms receive transfers from _______.
   A) government; government
   B) firms; households
   C) government; government and households
   D) firms and government; government
   E) government; no one
   Answer: A
   Topic: Circular flow and the government
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.3
   Status: Old
   AACSB: Reflective thinking
64) Of the following, the largest source of revenue for the federal government is
   A) personal income taxes.
   B) sales taxes.
   C) corporate income taxes.
   D) property taxes.
   E) lottery revenue.
Answer: A

65) ________ are the largest components of state and local government revenue.
   A) Transfers from federal government and corporate income taxes
   B) Transfers from federal government and sales taxes
   C) Individual income taxes and corporate income taxes
   D) Individual income taxes and sales taxes
   E) Corporate income taxes and lottery income
Answer: B

66) U.S. exports of goods and services flow to households and firms in ________, and U.S.
    financial inflows of capital flow to households and firms in ________.
    A) the United States; the United States
    B) the United States; the rest of the world
    C) the rest of the world; the United States
    D) the rest of the world; the rest of the world
    E) the United States; the rest of the world and the United States
Answer: C
2.4 Integrative Questions

1) If a product becomes more popular and consumers want more produced, which of the following best describes what happens to move more factors of production into that industry?
   A) An agency of the Federal government directs the movement of factors.
   B) The chief executive officers or presidents of corporations require that factors leave one industry and move to the other industry.
   C) Factor owners voluntarily move their factors because they want to satisfy the interests of consumers.
   D) Wages, rent, interest, and profit increase in that industry, thereby giving factors the incentive to move to that industry.
   E) Consumers increase their demand for the products and, as a result, the taxes the producers must pay decrease enabling the producers to hire more factors of production.

   Answer: D
   Topic: Integrative
   Skill: Level 3: Using models
   Section: Integrative
   Status: Old
   AACS: Analytical thinking

2) What determines the income flows that households receive?
   A) an agency of the Federal government
   B) what they choose to produce, how much is sold, and the price received when sold
   C) their ownership of factors of production, how much they sell in the factor markets, and the prices received when sold
   D) financial institutions such as banks
   E) what they choose to consume

   Answer: C
   Topic: Integrative
   Skill: Level 3: Using models
   Section: Integrative
   Status: Old
   AACS: Reflective thinking

3) What determines the revenue flows received by businesses?
   A) an agency of the Federal government
   B) what they choose to produce, how much is sold, and the price received when sold
   C) their ownership of factors of production, how much they sell in the factor markets, and the prices received when sold
   D) financial institutions such as banks
   E) what they pay the factors of production they employ

   Answer: B
   Topic: Integrative
   Skill: Level 3: Using models
   Section: Integrative
   Status: Old
   AACS: Reflective thinking
The figure above shows the circular flow model.

1) In the figure above, which of the following represents a real flow of a factor of production?
   A) labor
   B) wages
   C) goods bought
   D) services sold
   E) firms’ expenditures on factors of production

Answer: A

Topic: Circular flow model
Skill: Level 3: Using models
Section: Checkpoint 2.2
Status: Old
AACSB: Reflective thinking
2) In the figure above, which of the following represents a money flow?
   A) goods purchased
   B) interest
   C) capital
   D) services sold
   E) goods supplied
Answer: B

3) In the figure above, which of the following represents a real flow?
   A) expenditures on real estate services
   B) profit
   C) capital
   D) wages
   E) both B and D
Answer: C

4) In the figure above, which of the following transactions take place in the factor markets?
   i. Michael, a student, orders a computer from Dell online.
   ii. Peter gets a job at a Wal-Mart store.
   iii. Apple Computer opens a new store in Georgia.
   A) ii and iii    B) only i    C) only ii    D) only iii    E) i and ii
Answer: A
5) Margo orders a MacBook Pro computer from The Apple Store online to use it in her graphic design business. How will this be reflected in the figure above?
   A) as a flow of a factor of production
   B) as a flow of goods and services bought
   C) as expenditures on goods and services
   D) as goods and services supplied
   E) It won't be shown in the figure because this transaction takes place neither in goods markets nor in factor markets.

Answer: A

Topic: Circular flow model
Skill: Level 3: Using models
Section: Checkpoint 2.2
Status: Old
AACSB: Reflective thinking
The figure above shows governments in the circular flow.

6) In the figure above, households
   A) receive transfers directly from governments.
   B) buy goods and services from governments in goods markets.
   C) receive transfers from governments through factor markets.
   D) sell factors of production to governments.
   E) pay taxes to governments through factor markets.

Answer: A

Topic: Circular flow model
Skill: Level 3: Using models
Section: Checkpoint 2.2
Status: Old
AACSBB: Reflective thinking
7) In the figure above, firms
   A) pay taxes directly to governments.
   B) sell goods and services to governments in goods markets.
   C) receive transfers from governments through factor markets.
   D) own factors of production.
   E) do all of the above.

Answer: A
Topic: Circular flow model
Skill: Level 3: Using models
Section: Checkpoint 2.2
Status: Old
AACS: Reflective thinking

8) In the figure above, governments
   A) collect taxes.
   B) coordinate economic activities of households and firms.
   C) hire factors of production.
   D) own factors of production.
   E) sell goods and services to household.

Answer: A
Topic: Circular flow model
Skill: Level 3: Using models
Section: Checkpoint 2.2
Status: Old
AACS: Reflective thinking

9) In the figure above, which of the following is true?
   i. Governments coordinate economic activities of households and firms.
   ii. Governments buy goods and services in goods markets.
   iii. Households pay taxes directly to firms.

   A) only ii  B) only i  C) only iii  D) i and ii  E) ii and iii

Answer: A
Topic: Circular flow model
Skill: Level 3: Using models
Section: Checkpoint 2.2
Status: Old
AACS: Reflective thinking

10) Social Security tax is deducted from your paycheck. In the figure above, this will be shown as
    A) taxes flowing from households to governments.
    B) taxes flowing from firms to governments.
    C) taxes flowing from households to firms.
    D) wages flowing from firms to households.
    E) wages flowing from firms to governments.

Answer: A
Topic: Circular flow model
Skill: Level 3: Using models
Section: Checkpoint 2.2
Status: Old
AACS: Reflective thinking
2.6 Essay: What, How, and For Whom?

1) It is conventional to divide the nation’s total production into four categories. Name and explain the four categories. In the United States, which category accounts for the largest share and the smallest share of the nation’s total production?

Answer: The four categories of production are consumption goods and services, capital goods, government goods and services, and export goods and services. The division is based upon who purchases the goods and services. For instance, consumption goods and services are purchased by individuals for their own enjoyment whereas export goods and services are purchased by foreigners. In the United States, the largest of these four components is consumption goods and services. In 2011, consumption goods and services accounted for 61 percent of the total production. The smallest components were capital goods and export goods and services, which each accounted for 11 percent of the total production.

Topic: What we produce
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSBB: Written and oral communication

2) Explain the difference between consumption and capital goods.

Answer: A difference lies in the identity of the purchaser. Consumption goods (and services) are purchased by households and investment goods are purchased by firms. Households buy consumption goods to use for personal enjoyment. They contribute to the person’s standard of living. Firms buy capital goods to use as a factor of production. Capital goods are used along with the other factors of production, to help produce additional goods and services.

Topic: Consumption and capital goods
Skill: Level 3: Using models
Section: Checkpoint 2.1
Status: Old
AACSBB: Written and oral communication

3) Identify the four factors of production, and tell what type of income is earned by each factor.

Answer: The factors of production are land, which represents all the gifts of nature; labor, the work effort people put into producing goods and service; capital, goods that have been produced and are used as a productive resource to help produce other goods and services; and entrepreneurship, the human resource that organizes all the other factors of production. Land earns rent, labor earns wages, capital earns interest, and entrepreneurship earns profit or losses.

Topic: Factors of production
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSBB: Reflective thinking
4) What are the payments each factor of production receives?
   Answer: Rent is paid for the use of land. Wages are paid for the services of labor. Interest is paid for the use of productive capital. Entrepreneurs earn a profit.
   
   Topic: Factors of production
   Skill: Level 1: Definition
   Section: Checkpoint 2.1
   Status: Old
   AACSB: Reflective thinking

5) What is meant by the term "human capital"?
   Answer: Human capital refers to the skills people possess. These skills help increase the quality of labor. Human capital can be increased through education, on the job training, and experience. The knowledge and skill gained from these improvements are called human capital.
   
   Topic: Human capital
   Skill: Level 1: Definition
   Section: Checkpoint 2.1
   Status: Old
   AACSB: Reflective thinking

6) What effect, if any, will a good college education have on your human capital? Explain your answer.
   Answer: Human capital refers to the skills people possess. These skills can be gained through education, on the job training, and experience. Thus your college education is increasing your human capital.
   
   Topic: Human capital
   Skill: Level 3: Using models
   Section: Checkpoint 2.1
   Status: Old
   AACSB: Reflective thinking

7) Explain the differences between "human capital," "financial capital," and "capital."
   Answer: Human capital is the knowledge and skills people obtain from education, on-the-job training, and work experience. Financial capital is money, stocks, and bonds. Capital is tools, instruments, machines, buildings, and anything that had to be produced prior to production of the desired goods and services.
   
   Topic: Capital
   Skill: Level 1: Definition
   Section: Checkpoint 2.1
   Status: Old
   AACSB: Reflective thinking
8) What is the difference between "capital" and "financial capital"? Which is a factor of production?

Answer: "Capital" is the actual physical good, such as a factory, an assembly line, or a computer server. "Financial capital" is stocks, bonds, or money. Financial capital is used to fund the purchase of the (physical) capital. Financial capital is NOT a factor of production because it is not used to help produce goods and services. Capital, however, is a factor of production because capital is used to help produce goods and services.

Topic: Capital
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSB: Reflective thinking

9) What is the difference between the functional and the personal distribution of income?

Answer: The functional distribution of income shows how total income is divided among the factors of production. The personal distribution of income shows how total income is divided among households.

Topic: Distributions of income
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSB: Reflective thinking

10) In the United States, which factor of production earns the largest share of the nation’s total income?

Answer: The largest fraction of the nation's total income is earned by labor. In the United States, wages paid to labor account for about 69 percent of the nation's total income.

Topic: Functional distribution of income
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSB: Reflective thinking

11) In the United States, how does the income received by the richest 20 percent of individuals compare with the income received by the other 80 percent?

Answer: In the United States, the richest 20 percent of individuals receive about 51 percent of the nation's total income. Thus the other 80 percent of individuals receive the remainder, about 49 percent of the nation’s income. So the richest 20 percent of the individuals receive almost the same amount as the other 80 percent of people.

Topic: Personal distribution of income
Skill: Level 1: Definition
Section: Checkpoint 2.1
Status: Old
AACSB: Reflective thinking
2.7 Essay: The Global Economy

1) Compare and contrast the world population with that of the United States. Is the United States becoming a larger or a smaller part of the world’s population?

Answer: The U.S. population was approximately 311 million in 2011. It is growing at a rate of about one person in every 12 seconds. The world population in 2011 was about 7 billion and is growing at a rate of 30 people in the same 12 seconds. Hence the United States is becoming a smaller fraction of the world’s population.

Topic: Population
Skill: Level 2: Using definitions
Section: Checkpoint 2.2
Status: Old
AACSB: Reflective thinking

2) How many and what fraction of the world’s people live in advanced economies? In emerging market and developing economies?

Answer: There are approximately 7 billion people in the world. Of the 7 billion people, almost 1 billion or 15 percent, live in advanced economies. About 85 percent, or nearly 5.8 billion people live in emerging market and developing economies.

Topic: Population
Skill: Level 1: Definition
Section: Checkpoint 2.2
Status: Old
AACSB: Reflective thinking

3) The International Monetary Fund divides nations into three groups. What are the three groups and what are the characteristics of each group?

Answer: The International Monetary Fund divides nations into “advanced economies,” “developing economies,” and “emerging market economies.” Advanced economies are the countries or regions that have the highest living standards. Industrialized nations such as the United States, Canada, and Japan are included, as are the newly industrialized Asian economies. Developing economies are the countries that have yet to achieve a high standard of living. Nations in Africa, Central America, and South America fall into this category. The emerging market economies are nations that are changing how they organize their economies. In the past, their economic system relied upon state-ownership of capital and direct government management of the economy. They now are moving to more reliance upon a system of free enterprise, that is, a system similar to what exists in the United States. Emerging market economies are Russia and the other nations in Eastern and Central Europe that used to be Russian satellites.

Topic: Classification of countries
Skill: Level 3: Using models
Section: Checkpoint 2.2
Status: Old
AACSB: Written and oral communication
4) Discuss the distribution of income around the world. Which countries have the highest average incomes? Which countries have the lowest average incomes? How has the distribution of income changed in recent years?

Answer: Income is distributed unequally, with residents in the advanced economies having the highest average incomes. The highest living standard is in the United States, where the average income is $129 per day. Canada, Japan, the United Kingdom, and the Euro zone are close behind. In the poorest regions of the world, India and Africa, incomes are much lower. The average income is only $3 per day in India. The distribution of world income has become more equal in recent years because income in some very poor nations, especially China, has grown rapidly.

Topic: Distributions of income
Skill: Level 3: Using models
Section: Checkpoint 2.2
Status: Old
AACSB: Written and oral communication

5) Discuss the differences between developing and emerging market economies.

Answer: Although the average income in emerging market economies is less than that in advanced economies, developing countries generally have lower levels of income than emerging market economies. Emerging market economies are in some ways as developed as the advanced economies because they often have a well-trained labor force and a reasonable capital stock, both of which are typically missing in developing economies. But emerging market economies are struggling to raise their living standards. The main difference between emerging market economies and other economies is their economic system. Emerging market economies operated under state-owned production for many years and are now moving towards a free market system. Developing economies generally do not have the same history of a very long period of time operating under a system of state-owned production.

Topic: Developing and emerging market economies
Skill: Level 5: Critical thinking
Section: Checkpoint 2.2
Status: Old
AACSB: Written and oral communication

2.8 Essay: The Circular Flows

1) What is a market? Must a market have a single physical location?

Answer: A market is any arrangement that allows buyers and sellers to get together and transact their business. Although some markets have a physical location, such as a farmers’ market where buyers and sellers of fresh corn can meet face-to-face, markets do not require an actual location. Indeed, many markets, such as the local market for apartments, do not have a single physical location. Nonetheless, buyers and sellers (tenants and landlords) arrange purchases and sales (the rental of apartments and houses) through means other than meeting in one central location.

Topic: Markets
Skill: Level 1: Definition
Section: Checkpoint 2.3
Status: Old
AACSB: Written and oral communication
2) Explain the structure of the circular flow model.
   Answer: Households own the factors of production and sell the services from them to firms in the factor market. Income earned by households in the factor market is used to purchase goods and services from firms in the goods market. And the revenue the firms gain by selling the goods and services in the goods market is used to pay for the services of the factors of production they hire in the factor markets.
   Topic: Circular flow model
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.3
   Status: Old
   AACSBI: Written and oral communication

3) How are the roles of the household different in the goods market and in the factor markets?
   Answer: In the goods market, households are buyers. They purchase the goods and services produced by the firms. In exchange for the goods and services, households pay firms. In the factor market, households are sellers. They provide the services from land, labor, capital, and entrepreneurship to the firms. In the factor markets, households receive payments from firms.
   Topic: Circular flow model
   Skill: Level 2: Using definitions
   Section: Checkpoint 2.3
   Status: Old
   AACSBI: Written and oral communication

4) Describe the circular flow of the economy by discussing the two markets where households and firms meet.
   Answer: Firms and households meet in two markets: the goods market and the factors market. In the goods markets, households buy the goods and services that firms sell. In this market, households give firms money in exchange for the goods and services. In the factors market, households sell the services of the factors of production to firms, which buy the services of these factors. In the factors market, firms pay households money in exchange for the productive resources. Hence households earn their incomes in the factors market and spend their incomes in the goods market. And firms earn their revenue in the goods market and pay their costs in the factors market.
   Topic: Circular flow model
   Skill: Level 3: Using models
   Section: Checkpoint 2.3
   Status: Old
   AACSBI: Written and oral communication

5) Explain how public goods provided by the federal government differ from public goods provided by the state and local governments.
   Answer: The federal government provides goods and services such as national defense and the legal system. These are goods and services that benefit the entire nation or else substantial parts of it. The state and local governments provide mainly education and highways, which benefit primarily residents within the state or locality.
   Topic: Functions of state and local governments
   Skill: Level 1: Definition
   Section: Checkpoint 2.3
   Status: Old
   AACSBI: Written and oral communication
6) Describe the government’s flows in the circular flow model of the economy.

Answer: The government has several flows in the circular flow model. First, the government taxes households and firms. Hence, funds flow from households and firms to the government. Second, the government transfers income back to households, via payments such as social security. In this case, funds flow from the government to households. The government also purchases goods and services from firms in the goods market. In this case, goods and services flow to the government and payments flow to firms.

Topic: Circular flow and the government
Skill: Level 2: Using definitions
Section: Checkpoint 2.3
Status: Old
AACSB: Written and oral communication
7) Label the flows in the simplified circular flow diagram that ignores the government.
The figure above shows the labeled flows.

**Topic:** Circular flow model

**Skill:** Level 2: Using definitions

**Section:** Checkpoint 2.3

**Status:** Old

**AACSB:** Reflective thinking
8) Draw a circular flow diagram with households and firms and without government. Label the markets and the flows in the circular flow diagram.

Answer:

A circular flow diagram with the markets and flows labeled is in the figure above.

9) Explain how the largest sources of state tax revenues differs from the largest sources of federal tax revenues.

Answer: The two largest sources of federal tax revenues are from the personal income tax and Social Security taxes. Most state tax revenues are from sales and property taxes. There are no federal property or sales taxes. There is no state social security tax. And, although there are state income taxes, they do not take in as much revenue as do other state taxes.

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10) What are the two largest sources of tax revenues for the U.S. federal government?

Answer: The largest source of tax revenue for the U.S. federal government is personal income taxes, that is, the income taxes that individuals pay. The second largest source of revenue is social security taxes. Personal income taxes account for about 41 percent of the federal government's revenue and social security taxes account for about 40 percent, so together these two sources of revenue are 81 percent of the federal government's total tax revenues.

Topic: Federal government
Skill: Level 1: Definition
Section: Checkpoint 2.3
Status: Old
AACSB: Reflective thinking

11) What is the largest source of tax revenue for the U.S. federal government and what is the largest expenditure item of the U.S. federal government?

Answer: The largest source of tax revenue for the U.S. federal government is personal income taxes, that is, the income taxes that individuals pay. The largest expenditure of the U.S. federal government is spending on Medicare and Medicaid.

Topic: Federal government
Skill: Level 1: Definition
Section: Checkpoint 2.3
Status: Old
AACSB: Reflective thinking
Chapter 3  The Economic Problem

3.1 Production Possibilities

1) The United States produced approximately ________ worth of goods and services in 2011.
   A) $15 trillion  
   B) $15 billion  
   C) $150 trillion  
   D) $150 billion  
   E) $1,500 trillion  
   Answer: A  
   Topic: Production possibilities  
   Skill: Level 1: Definition  
   Section: Checkpoint 3.1  
   Status: Old  
   AACSB: Reflective thinking  

2) Which of the following is an assumption used when drawing a production possibilities frontier?  
   i.  Human wants and desires are limited to what is available.  
   ii. Only two goods are considered.  
   iii. The level of technology is fixed and unchanging.  
   A) i only  
   B) ii only  
   C) i and iii  
   D) ii and iii  
   E) i, ii, and iii  
   Answer: D  
   Topic: Production possibilities frontier  
   Skill: Level 2: Using definitions  
   Section: Checkpoint 3.1  
   Status: Old  
   AACSB: Reflective thinking  

3) In the production possibilities model, the vertical axis measures ________ and the horizontal axis measures ________.
   A) the quantity of a good or service; the quantity of another good or service  
   B) the price of a good or service; the quantity of the good or service  
   C) the price of a good or service; the price of another good or service  
   D) the quantity of a good or service; time  
   E) people’s wants; the quantity of a good or service  
   Answer: A  
   Topic: Production possibilities frontier  
   Skill: Level 2: Using definitions  
   Section: Checkpoint 3.1  
   Status: Old  
   AACSB: Reflective thinking
4) The production possibilities frontier illustrates the
   A) maximum combinations of goods and services that can be produced.
   B) resources the economy possess, but not its level of technology.
   C) goods and services that people want.
   D) limits to people’s wants.
   E) amount of each good that people want to buy.
Answer: A

5) When drawing a production possibilities frontier, which of the following is held constant?
   A) the amount of money in the economy
   B) the available factors of production and the state of technology
   C) the prices of goods and services
   D) the quantity of the goods and services that are produced
   E) None of the above because nothing is held constant when drawing the production possibilities frontier.
Answer: B

6) A production possibilities frontier shows
   A) the various combinations of output a nation can produce a certain time, given its available resources and technology.
   B) the limits to future growth of a nation.
   C) how money can be allocated among two kinds of goods.
   D) that if price of one good decreases, the price of the other has to increase.
   E) that it is impossible to produce inefficiently.
Answer: A
7) The production possibilities frontier is the
   A) maximum output that can be produced at an opportunity cost of zero.
   B) minimum output that can be produced when resources are used inefficiently.
   C) boundary between the combinations of goods and services that can be produced and the combinations that cannot be produced, given the available factors of production and the state of technology.
   D) boundary between the combinations of goods and services that can be produced and the combinations that cannot be produced when technology is changing.
   E) maximum opportunity cost combinations of goods and services.

Answer: C

8) The production possibilities frontier is the boundary between the
   A) goods and services that the economy can produce.
   B) attainable and unattainable combinations of goods and services.
   C) wanted and unwanted combinations of goods and services.
   D) rational and irrational choices facing a society.
   E) affordable and unaffordable combinations of production.

Answer: B

9) Consider a production possibility frontier with jeans on the vertical axis and shoes on the horizontal axis. As the country moves along the frontier closer to the horizontal axis,
   A) more jeans are produced.
   B) the country eventually chooses an unattainable point.
   C) free lunches occur.
   D) more tradeoffs occur.
   E) more shoes are produced.

Answer: E
10) While moving along a production possibilities frontier, the amount of labor ________, the amount of capital ________, and the level of technology ________.

A) is fixed; is fixed; varies
B) varies; is fixed; varies
C) varies; is fixed; is fixed
D) is fixed; is fixed; is fixed
E) varies; varies; varies

Answer: D

*Topic: Production possibilities frontier*

*Skill: Level 3: Using models*

*Section: Checkpoint 3.1*

*Status: Old*

*AACSB: Reflective thinking*

<table>
<thead>
<tr>
<th>Possibility</th>
<th>Airplanes (number)</th>
<th>Cruise ships (number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>C</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>D</td>
<td>0</td>
<td>60</td>
</tr>
</tbody>
</table>

11) The table above gives four production possibilities for airplanes and cruise ships. In possibility A, how many resources are devoted to the production of airplanes?

A) 0
B) few
C) most
D) all
E) It is impossible to tell without more information about the prices of airplanes and cruise ships.

Answer: D

*Topic: Production possibilities frontier*

*Skill: Level 3: Using models*

*Section: Checkpoint 3.1*

*Status: Old*

*AACSB: Analytical thinking*

12) The table above gives four production possibilities for airplanes and cruise ships. In possibility A, how many resources are devoted to the production of cruise ships?

A) 0
B) few
C) most
D) all
E) It is impossible to tell without more information about the prices of airplanes and cruise ships.

Answer: A

*Topic: Production possibilities frontier*

*Skill: Level 3: Using models*

*Section: Checkpoint 3.1*

*Status: Old*

*AACSB: Analytical thinking*
13) Moving from one point to another on a production possibilities frontier implies
   A) increasing the production of both goods.
   B) decreasing the production of both goods.
   C) increasing the production of one good and decreasing the production of another.
   D) holding the production levels of both goods constant.
   E) changing the amount of factors of production that are employed.

   Answer: C

14) Assume that an association of young workers has lobbied Congress to require that all workers
    retire once they reach the age of fifty. What impact would this law have on the nation's
    production possibilities frontier?
   A) no impact at all
   B) The level of unemployment would decrease so the production possibilities frontier
      would shift outward.
   C) The nation would move to a new position on its production possibilities frontier but the
      frontier itself would not shift.
   D) The production possibilities frontier would shift inward.
   E) The number of young workers would increase so the production possibilities frontier
      would shift outward.

   Answer: D

15) A major earthquake occurs in the central part of the United States. What impact would this
    have on the nation's production possibilities frontier and why?
   A) It would shift outward because unemployment would be reduced.
   B) Nothing would happen because the nation would still have the same capabilities.
   C) A tradeoff would occur to replace the resources and goods destroyed.
   D) It would shift inward because some of the nation's resources, such as capital and labor,
      would be destroyed.
   E) It would not shift because people would get to work to replace any capital that was
      destroyed.

   Answer: D
16) When all of the available factors of production are being efficiently employed, the
   A) economy is producing at a point within its PPF.
   B) economy is producing at a point on its PPF.
   C) economy is producing at a point beyond its PPF.
   D) PPF disappears.
   E) opportunity cost of changing production is infinite.
   Answer: B

17) In a production possibilities frontier diagram, the attainable production points are shown as
   A) only the points on the production possibilities frontier.
   B) only the points beyond the production possibilities frontier.
   C) only the points inside the production possibilities frontier.
   D) the points inside and the points on the production possibilities frontier.
   E) any of the production points.
   Answer: D

18) In the production possibilities frontier model, an unattainable point lies
   A) only on the production possibilities frontier itself.
   B) only inside the production possibilities frontier.
   C) only outside the production possibilities frontier.
   D) both on and outside the production possibilities frontier.
   E) There are no unattainable points in the production possibilities model.
   Answer: C

19) Production efficiency is represented by ______ a production possibilities frontier.
   A) all points on
   B) all points inside
   C) all points outside
   D) a movement along
   E) only one point on
   Answer: A
20) If an economy cannot produce more of one good without producing less of another good, this implies that which of the following has been achieved?
   A) allocative efficiency
   B) minimum marginal cost
   C) PPF efficiency
   D) production efficiency
   E) maximum marginal benefit

Answer: D

Topic: Production efficiency
Skill: Level 2: Using definitions
Section: Checkpoint 3.1
Status: Old
AACSB: Reflective thinking

21) Production efficiency occurs
   A) anywhere inside or on the production possibilities frontier.
   B) when the total cost of production is minimized.
   C) at all points on the production possibilities frontier.
   D) at only one point on the production possibilities frontier.
   E) at all points inside the production possibilities frontier.

Answer: C

Topic: Production efficiency
Skill: Level 2: Using definitions
Section: Checkpoint 3.1
Status: Old
AACSB: Reflective thinking

22) When production efficiency does NOT occur,
   i. an economy is producing at a point within its PPF.
   ii. there are unemployed resources.
   iii. allocative efficiency cannot occur.

   A) i only
   B) i and ii
   C) iii only
   D) i and iii
   E) i, ii, and iii

Answer: E

Topic: Production efficiency
Skill: Level 3: Using models
Section: Checkpoint 3.1
Status: Old
AACSB: Reflective thinking
23) If there is unemployment in an economy, then the
   A) production possibilities frontier will shift inwards.
   B) economy is operating at an unattainable point.
   C) production possibilities frontier will shift outwards.
   D) economy is producing at a point inside the production possibilities frontier.
   E) production possibilities frontier must be bowed inward.
Answer: D

Topic: Attainable points, unemployment
Skill: Level 1: Definition
Section: Checkpoint 3.1
Status: Old
AACSB: Reflective thinking

24) If a society moves from a period of time with significant unemployment to a time with full employment, its production possibilities frontier will
   A) shift leftward.
   B) shift rightward.
   C) not shift because the society moves from one point on the frontier to a point inside the frontier.
   D) not shift because the society moves from a point inside the frontier to a point on the frontier.
   E) not shift because the society moves from one point on the frontier to a point outside the frontier.
Answer: D

Topic: Attainable points, unemployment
Skill: Level 3: Using models
Section: Checkpoint 3.1
Status: Old
AACSB: Analytical thinking

25) Suppose that an economy is currently producing at a point that lies inside of its production possibilities set. Which of the following would best explain this circumstance?
   A) The economy does not have enough resources to produce at a point closer to the frontier of the production possibilities set.
   B) The prevailing level of technology prevents the economy from producing at a point closer to the frontier of the production possibilities set.
   C) The economy is experiencing a high level of unemployment.
   D) Any of the above statements could explain this situation.
   E) None of the above statements could explain this situation.
Answer: C

Topic: Attainable points, unemployment
Skill: Level 3: Using models
Section: Checkpoint 3.1
Status: New
AACSB: Analytical thinking
26) Which of the following statements is correct?
   A) An increase in productivity moves the economy from inside the production possibilities frontier to the frontier itself.
   B) An increase in productivity shifts the economy from producing at a point on the production possibilities frontier to a point outside the production possibilities frontier.
   C) An increase in unemployment shifts the economy further inside its production possibilities frontier.
   D) An increase in unemployment shifts the economy from a point outside the production possibilities frontier back to the production possibilities frontier.
   E) A reduction in unemployment shifts the entire production possibilities frontier outward.

   Answer: C

27) A point on the production possibilities frontier reflects an
   A) attainable point with full employment of all resources.
   B) attainable point without full employment of all resources.
   C) unattainable point with full employment of all resources.
   D) unattainable point without full employment of all resources.
   E) None of the above answers is correct.

   Answer: A

28) Suppose a country operates on its production possibility frontier when it produces 1000 books and 1000 tables. The combination of _______ reflects _______
   A) 500 books and 1000 tables; an inefficient but attainable point.
   B) 1000 books and 500 tables; an efficient point.
   C) 1000 books and 1000 tables; a free lunch.
   D) 500 books and 500 tables; an attainable and efficient point.
   E) 1000 books and 1500 tables; a free lunch.

   Answer: A
29) Consider a production possibility frontier with books and tables. A combination of 1000 books and 500 tables is on the frontier. Which of the following are true?
   i. Production of 700 books and 400 tables is attainable but inefficient.
   ii. Production of 1000 books and 600 tables is unattainable.
   iii. Production of 500 books and 1000 tables is inside the frontier.

   A) i and ii
   B) i, ii and iii
   C) i and iii
   D) ii and iii
   E) i only

   Answer: A

30) The table above shows a production possibilities frontier for an economy. Which of the following combinations is unattainable?

   A) 0 loaves of bread and 800 books
   B) 100 loaves of bread and 800 books
   C) 200 loaves of bread and 800 books
   D) 300 loaves of bread and 200 books
   E) 0 loaves of bread and 0 books

   Answer: C
31) The table above shows a production possibilities frontier for an economy. If the economy tried to produce a combination of 250 loaves of bread and 800 books,
   A) there is some unemployment.
   B) there is full employment.
   C) the tradeoff between bread and books is inefficient.
   D) it cannot produce this combination because it lacks enough resources or technology.
   E) it is enjoying a free lunch.

Answer: D

Topic: Unattainable points
Skill: Level 3: Using models
Section: Checkpoint 3.1
Status: Old
AACSBS: Analytical thinking

32) The figure above shows the production possibilities frontier for a country. A combination of 4 million gallons of milk and 4 million gallons of ice cream is
   A) unattainable.
   B) attainable and production efficient.
   C) attainable and production inefficient.
   D) unattainable and production efficient.
   E) More information is needed to determine if the point is attainable or not.

Answer: A

Topic: Unattainable points
Skill: Level 3: Using models
Section: Checkpoint 3.1
Status: Old
AACSBS: Analytical thinking
33) The figure above shows the production possibilities frontier for a country. A combination of 3 million gallons of milk and 3 million gallons of ice cream is
   A) unattainable.
   B) attainable and production efficient.
   C) attainable and production inefficient.
   D) unattainable and production efficient.
   E) More information is needed to determine if the point is attainable or not.

Answer: B

Topic: Attainable points, full employment
Skill: Level 3: Using models
Section: Checkpoint 3.1
Status: Old
AACSB: Analytical thinking

34) The figure above shows the production possibilities frontier for a country. A combination of 2 million gallons of milk and 2 million gallons of ice cream is
   A) unattainable.
   B) attainable and production efficient.
   C) attainable and production inefficient.
   D) attainable but more than production efficient.
   E) More information is needed to determine if the point is attainable or not.

Answer: C

Topic: Attainable points, unemployment
Skill: Level 3: Using models
Section: Checkpoint 3.1
Status: Old
AACSB: Analytical thinking
35) Point D in the above PPF figure is
   A) an attainable production combination with unemployed resources.
   B) a tradeoff.
   C) an unattainable production combination.
   D) a production combination that can be attained once resources are fully employed.
   E) More information is needed to determine which of the above answers is correct.

Answer: C

Topic: Unattainable points
Skill: Level 3: Using models
Section: Checkpoint 3.1
Status: Old
AACSB: Analytical thinking

36) Which point in the figure above is an attainable combination that would have unemployed resources?
   A) point A
   B) point B
   C) point C
   D) point D
   E) point A and point B

Answer: C

Topic: Attainable points, unemployment
Skill: Level 3: Using models
Section: Checkpoint 3.1
Status: Old
AACSB: Analytical thinking
37) The figure above shows a nation’s production possibilities frontier. In the figure, point \( A \) shows
- A) the maximum quantity of pizza that can be produced.
- B) the minimum quantity of pizza that the society must produce.
- C) an unattainable point.
- D) an attainable point with unemployed resources.
- E) More information is needed to determine which of the above answers is correct.

Answer: A

Topic: Attainable points
Skill: Level 3: Using models
Section: Checkpoint 3.1
Status: Old
AACSB: Analytical thinking

38) The figure above shows a nation’s production possibilities frontier. In the figure, point \( B \) shows
- A) an unattainable point.
- B) an attainable point.
- C) a point with a free lunch.
- D) a point with no tradeoff.
- E) a point at which there are unemployed resources.

Answer: A

Topic: Unattainable points
Skill: Level 3: Using models
Section: Checkpoint 3.1
Status: Old
AACSB: Analytical thinking
39) The figure above shows the production possibilities frontier for a country. In order for it to produce at point $E$, the
A) country would need to acquire more resources and/or more advanced technology.
B) production of compact cars would need to decrease.
C) production of SUVs would need to decrease.
D) country would need to use its resources more efficiently.
E) country would need to determine that compact cars and SUVs are equally important to it.

Answer: A

40) The figure above shows the production possibilities frontier for a country. If the country is producing at point $D$, then the
A) resources are being used efficiently.
B) technology associated with producing SUVs and compact cars is advancing.
C) resources are not being used efficiently and/or are unemployed.
D) production of SUVs and compact cars is maximized.
E) None of the above answers is correct because it is not possible to produce at point $D$.

Answer: C
41) The above figure shows the production possibility frontier for an economy. The point or points that are attainable and production efficient are
A) points B and C.
B) points A, B, and C.
C) point E.
D) points A, B, C, and D.
E) points A and D.

Answer: B
Topic: Production possibilities frontier
Skill: Level 2: Using definitions
Section: Checkpoint 3.1
Status: Old
AACSB: Analytical thinking

42) The above figure shows the production possibility frontier for an economy. The point or points that are attainable are
A) points B and C.
B) points A, B, and C.
C) point E.
D) points A, B, C, and D.
E) points A and D.

Answer: D
Topic: Production possibilities frontier
Skill: Level 2: Using definitions
Section: Checkpoint 3.1
Status: Old
AACSB: Analytical thinking
43) The above figure shows the production possibility frontier for an economy. The point or points that are NOT attainable are
   A) points B and C.
   B) points A, B, and C.
   C) point E.
   D) points A, B, C, and D.
   E) points A and D.
   Answer: C
   Topic: Production possibilities frontier
   Skill: Level 2: Using definitions
   Section: Checkpoint 3.1
   Status: Old
   AACSB: Analytical thinking

44) In order for Ireland to grow more potatoes, wool production must decrease. This situation is an example of
   A) producing at a point that lies beyond the PPF.
   B) zero opportunity cost.
   C) opportunity benefit.
   D) a free lunch.
   E) a tradeoff.
   Answer: E
   Topic: Tradeoffs
   Skill: Level 1: Definition
   Section: Checkpoint 3.1
   Status: Old
   AACSB: Reflective thinking

45) As we move along the production possibilities frontier,
   A) the production of one good increases as the production of the other good decreases.
   B) the possibilities of tradeoffs diminish.
   C) a tradeoff is not possible because nations need all goods.
   D) more of both goods can be produced.
   E) less of both goods can be produced.
   Answer: A
   Topic: Tradeoffs
   Skill: Level 4: Applying models
   Section: Checkpoint 3.1
   Status: Old
   AACSB: Reflective thinking
46) Which of the following statements is correct?
   A) If capital is idle, the economy is producing at its full potential.
   B) The production possibilities frontier shows that there are no limits to production.
   C) A tradeoff is a limit that forces an exchange or a substitution of one thing for something else.
   D) Any point on or within the PPF is production efficient.
   E) None of the above answers is correct.

   Answer: C
   Topic: Tradeoffs
   Skill: Level 2: Using definitions
   Section: Checkpoint 3.1
   Status: Old
   AACSB: Reflective thinking

47) When a nation is producing on its production possibilities frontier, if more resources are used to produce one good, then the production of other goods
   A) must increase.
   B) must decrease.
   C) must remain the same.
   D) must change, but they might increase or decrease.
   E) might increase if the nation can produce more efficiently.

   Answer: B
   Topic: Tradeoffs
   Skill: Level 3: Using models
   Section: Checkpoint 3.1
   Status: Old
   AACSB: Reflective thinking

48) The negative slope of the production possibilities frontier represents the idea
   A) that free lunches are possible.
   B) of tradeoffs, that in order to produce more of one good, the nation must produce less of another.
   C) of unemployment.
   D) of inefficient production.
   E) that prices rise as less is produced.

   Answer: B
   Topic: Tradeoffs
   Skill: Level 4: Applying models
   Section: Checkpoint 3.1
   Status: Old
   AACSB: Reflective thinking
49) A movement from one point on a production possibilities frontier to another represents
   A) a tradeoff.
   B) a free lunch.
   C) full employment of labor but not capital.
   D) unemployment.
   E) an advance in technology.
   Answer: A
   Topic: Tradeoffs
   Skill: Level 3: Using models
   Section: Checkpoint 3.1
   Status: Old
   AACSB: Reflective thinking

50) The saying "There's no such thing as a free lunch," applies
   A) when there is some unemployment.
   B) on the production possibilities frontier.
   C) to unattainable combinations of goods and services.
   D) when more of one good can be produced without decreasing production of another.
   E) at all points inside the PPF.
   Answer: B
   Topic: Tradeoffs
   Skill: Level 2: Using definitions
   Section: Checkpoint 3.1
   Status: Old
   AACSB: Reflective thinking

51) A free lunch (the absence of a tradeoff) when the production of a good is increased is possible
   for the entire economy only if
   A) less of some product is produced.
   B) prices are decreased.
   C) prices are increased.
   D) resources are used inefficiently.
   E) there is a movement along the PPF.
   Answer: D
   Topic: Free lunches
   Skill: Level 2: Using definitions
   Section: Checkpoint 3.1
   Status: Old
   AACSB: Reflective thinking
52) A movement from a point inside the production possibilities frontier to a point on the production possibilities frontier represents
   A) a tradeoff.
   B) a free lunch.
   C) full employment of labor but not capital.
   D) unemployment of labor but not capital.
   E) an infinite opportunity cost.

Answer: B  
Topic: Free lunches  
Skill: Level 3: Using models  
Section: Checkpoint 3.1  
Status: Old  
AACS B: Reflective thinking

53) A reason the production possibilities frontier exists is
   A) unlimited resources and technology.
   B) scarcity of resources.
   C) scarcity of resources and unlimited technology.
   D) unemployment.
   E) that people’s wants are unlimited.

Answer: B  
Topic: Production possibilities frontier  
Skill: Level 1: Definition  
Section: Checkpoint 3.1  
Status: Old  
AACS B: Reflective thinking

54) The production possibilities frontier is a graph showing the
   A) exact point of greatest efficiency for producing goods and services.
   B) tradeoff between free lunches.
   C) maximum combinations of goods and services that can be produced.
   D) minimum combinations of goods and services that can be produced.
   E) resources available for the economy’s production use.

Answer: C  
Topic: Production possibilities frontier  
Skill: Level 1: Definition  
Section: Checkpoint 3.1  
Status: Old  
AACS B: Reflective thinking
55) The production possibilities frontier is a boundary that separates
   A) the combinations of goods that can be produced from the combinations of services.
   B) attainable combinations of goods and services that can be produced from unattainable
      ones.
   C) equitable combinations of goods and services that can be produced from inequitable
      ones.
   D) fair combinations of goods and services that can be consumed from unfair ones.
   E) affordable production points from unaffordable points.

   Answer: B
   Topic: Production possibilities frontier
   Skill: Level 1: Definition
   Section: Checkpoint 3.1
   Status: Old
   AACSB: Reflective thinking

56) Points inside the PPF are all
   A) unattainable and have fully employed resources.
   B) attainable and have fully employed resources.
   C) unattainable and have some unemployed resources.
   D) attainable and have some unemployed resources.
   E) unaffordable.

   Answer: D
   Topic: Attainable points, inefficiency
   Skill: Level 2: Using definitions
   Section: Checkpoint 3.1
   Status: Old
   AACSB: Reflective thinking

57) During a time of high unemployment, a country can increase the production of one good or
    service
    A) without decreasing the production of something else.
    B) but must decrease the production of something else.
    C) and must increase the production of something else.
    D) by using resources in the production process twice.
    E) but the opportunity cost is infinite.

   Answer: A
   Topic: Free lunches
   Skill: Level 1: Definition
   Section: Checkpoint 3.1
   Status: Old
   AACSB: Reflective thinking
58) Moving along the production possibilities frontier itself illustrates
   A) the existence of tradeoffs.
   B) the existence of unemployment of some factors of production.
   C) the benefits of free lunches.
   D) how free lunches can be exploited through trade.
   E) how tradeoffs need not occur if the economy is efficient.

Answer: A
Topic: Tradeoffs
Skill: Level 1: Definition
Section: Checkpoint 3.1
Status: Old
AACSBS: Reflective thinking

59) The production possibilities frontier illustrates which of the following economic ideas?
   A) efficiency
   B) tradeoffs
   C) opportunity cost
   D) all of the above
   E) none of the above

Answer: D
Topic: Production possibilities frontier
Skill: Level 3: Using models
Section: Checkpoint 3.1
Status: New
AACSBS: Reflective thinking

60) Points on the PPF are all
   A) unattainable and have fully employed resources.
   B) free lunches.
   C) inefficient.
   D) attainable and have some unemployed resources.
   E) production efficient.

Answer: E
Topic: Production efficiency
Skill: Level 1: Definition
Section: Checkpoint 3.1
Status: Old
AACSBS: Reflective thinking
3.2 Opportunity Cost

1) In a production possibilities frontier graph, the cost of producing more units of a good is measured by the
   A) dollar value of the resources used to produce the good.
   B) amount of the other good or service that must be forgone.
   C) dollar value of the additional output.
   D) area in the arc between the PPF and a straight line drawn between the starting point and the ending point.
   E) None of the above answers is correct.

   Answer: B

2) The opportunity cost of producing one more unit of a good is calculated by dividing the
   A) increase in the quantity of that good by the decrease in the quantity of other good.
   B) total quantity of that good by the total quantity of other good.
   C) decrease in the quantity of the other good by the increase in the quantity of the good whose opportunity cost we’re calculating.
   D) total quantity of the other good by the total quantity of the good whose opportunity cost we’re calculating.
   E) price of the good whose opportunity cost we are calculating by the number of units of the other good that are forgone.

   Answer: C

3) To find the opportunity cost of producing one more unit of any product while on the production possibilities frontier requires
   A) setting the amounts of the two products equal to each other.
   B) setting the change in one product equal to the change in the other product.
   C) dividing the amount of the product forgone by the amount of the product gained.
   D) subtracting the change in the product whose production increased from the change in the product whose production decreased.
   E) None of these describes how to find opportunity cost.

   Answer: C
4) To calculate the opportunity cost per unit, you divide the decrease in the quantity of the forgone item by the
   A) decrease in the quantity of the other item.
   B) increase in the quantity of the other item obtained.
   C) price of the item obtained.
   D) price of the item forgone.
   E) price of the item obtained and then multiply by the price of the item forgone.
   Answer: B

Topic: Opportunity cost
Skill: Level 2: Using definitions
Section: Checkpoint 3.2
Status: Old
AACSBS: Analytical thinking

5) On a production possibilities frontier, 500 pounds of apples and 1,200 pounds of bananas can be produced while at another point on the same frontier, 300 pounds of apples and 1,300 pounds of bananas can be produced. Between these points, what is the opportunity cost of producing a pound of bananas?
   A) 2 pounds of bananas
   B) 200 pounds of apples
   C) 2 pounds of apples
   D) 0.5 a pound of apples
   E) 12/5 = 2.4 pounds of apples
   Answer: C

Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 3.2
Status: Old
AACSBS: Analytical thinking

6) On a production possibilities frontier, 500 pounds of apples and 1,200 pounds of bananas can be produced while at another point on the same frontier, 300 pounds of apples and 1,300 pounds of bananas can be produced. Between these points, what is the opportunity cost of producing a pound of apples?
   A) 2 pounds of bananas
   B) 100 pounds of bananas
   C) 2 pounds of apples
   D) 0.5 of a pound of bananas
   E) 5/12 of a pound of bananas
   Answer: D

Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 3.2
Status: Old
AACSBS: Analytical thinking
7) A country produces only apples and bananas. Moving from point A to point B along its production possibilities frontier, 5 apples are forgone and 4 bananas are gained. What is the opportunity cost of a banana?
   A) 4 apples
   B) 5/4 of an apple
   C) 4/5 of an apple
   D) 1 banana
   E) None of the above answers is correct.

Answer: B

8) A country produces only apples and bananas. Moving from point A to point B along its production possibilities frontier, 5 apples are gained and 4 bananas are forgone. What is the opportunity cost of an apple?
   A) 4 bananas
   B) 5/4 of a bananas
   C) 4/5 of a banana
   D) 1 apple
   E) None of the above answers is correct.

Answer: C

9) Robinson Crusoe divides his time between catching fish and gathering fruit. Part of his production possibilities frontier is given in the above table. If Mr. Crusoe is on his PPF and he increases the amount of fruit he gathers from 56 to 90 pounds, the opportunity cost is

   A) 37 pounds of fish.
   B) 31 pounds of fish.
   C) 17 pounds of fish.
   D) 34 pounds of fruit.
   E) 90 pounds of fruit.

Answer: C
10) Robinson Crusoe divides his time between catching fish and gathering fruit. Part of his production possibilities frontier is given in the above table. Mr. Crusoe, while lonesome, is efficient and always stays on his PPF. Mr. Crusoe is consuming 20 pounds of fish. Then he decides to slowly become a vegetarian and decrease his consumption of fish to 9 pounds. This decision means that Mr. Crusoe will
   A) incur an opportunity cost of 9 pounds of fruit.
   B) incur an opportunity cost of 20 pounds of fish.
   C) be able to enjoy a gain of 9 pounds of fruit.
   D) incur an opportunity cost of 99 pounds of fruit.
   E) incur an opportunity cost of 9 pounds of fish.

Answer: C

Topic: Opportunity cost
Skill: Level 2: Using definitions
Section: Checkpoint 3.2
Status: Old
AACSB: Analytical thinking

<table>
<thead>
<tr>
<th>Possibility</th>
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<td>40</td>
</tr>
<tr>
<td>B</td>
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<td>20</td>
</tr>
<tr>
<td>G</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

11) The table above shows a nation’s production possibilities frontier. If the nation wants to produce 4 robots and 34 pizzas,
   A) it will shift the production possibilities frontier.
   B) the opportunity cost is 9 pizzas.
   C) the nation will be producing inefficiently.
   D) it will be unable to do so because the production point is unattainable.
   E) the nation will then be producing at a production efficient point.

Answer: D

Topic: Unattainable points
Skill: Level 3: Using models
Section: Checkpoint 3.2
Status: Old
AACSB: Analytical thinking
12) The table above shows a nation’s production possibilities frontier. If the nation chooses to increase the production of robots from 2 to 3 and it is on its PPF, it will have to forgo _______.

A) 37  
B) 34  
C) 3  
D) 35.5  
E) None of the above answers is correct.

Answer: C

13) The table above shows a nation’s production possibilities frontier. The opportunity cost of a robot between combination D and E is

A) 4 pizzas.  
B) 34 pizzas.  
C) 30 pizzas.  
D) 1/4 of a pizza.  
E) undefined because neither point is production efficient.

Answer: A
14) The figure above shows the production possibilities frontier for a country. The opportunity cost of a gallon of milk between combination point A and B is
   A) 4 gallons of ice cream for a gallon of milk.
   B) 3 gallons of ice cream for a gallon of milk.
   C) 1 gallon of ice cream for a gallon of milk.
   D) 1/3 of a gallon of ice cream for a gallon of milk.
   E) zero because at point A, zero milk is being produced.

   Answer: D

   Topic: Opportunity cost
   Skill: Level 3: Using models
   Section: Checkpoint 3.2
   Status: Old
   AACSB: Analytical thinking

15) The figure above shows the production possibilities frontier for a country. If the economy is operating at point B, then the opportunity cost of another million gallons of milk is
   A) 4 gallons of ice cream for a gallon of milk.
   B) 3 gallons of ice cream for a gallon of milk.
   C) 1 gallon of ice cream for a gallon of milk.
   D) 1/3 of a gallon of ice cream for a gallon of milk.
   E) zero because after producing another million gallons of milk, then zero gallons of ice cream are produced.

   Answer: B

   Topic: Opportunity cost
   Skill: Level 3: Using models
   Section: Checkpoint 3.2
   Status: Old
   AACSB: Analytical thinking
16) The above figure shows the production possibility frontier for a country. Suppose the country is producing at point A. What is the opportunity cost of increasing the production of rice to 12 tons?
   A) 15 thousand bottles of wine
   B) 6 thousand bottles of wine
   C) 9 thousand bottles of wine
   D) 12 tons of rice
   E) Nothing, it is a free lunch.

   Answer: B

   Topic: Opportunity cost
   Skill: Level 3: Using models
   Section: Checkpoint 3.2
   Status: Old
   AACSB: Analytical thinking

17) The above figure shows the production possibility frontier for a country. Suppose the country is producing at point D. What is the opportunity cost of increasing the production of rice to 15 tons?
   A) 9 thousand bottles of wine
   B) 6 thousand bottles of wine
   C) 15 thousand bottles of wine
   D) 12 tons of rice
   E) Nothing, it is a free lunch.

   Answer: A

   Topic: Opportunity cost
   Skill: Level 3: Using models
   Section: Checkpoint 3.2
   Status: Old
   AACSB: Analytical thinking
18) The above figure shows the production possibility frontier for a country. Suppose the country is producing at point E. What would be the opportunity cost to increase the production of wine to 9 thousand bottles?
   A) 12 tons of rice
   B) 15 thousand bottles of wine
   C) 9 thousand bottles of wine
   D) 3 tons of rice
   E) Nothing, it is a free lunch.

Answer: D
Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 3.2
Status: Old
AACSBS: Analytical thinking

19) The above figure shows the production possibility frontier for a country. Suppose the country is producing at point D. What would be the opportunity cost to move to point C?
   A) 6 thousand bottles of wine
   B) 15 thousand bottles of wine
   C) 12 tons of rice
   D) Nothing, it is a free lunch.
   E) This movement is not possible without economic growth.

Answer: E
Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 3.2
Status: Old
AACSBS: Analytical thinking

20) The above figure shows the production possibility frontier for a country. Suppose the country is producing at point A. What would be the opportunity cost to increase the production of rice to 12 tons?
   A) 6 thousand bottles of wine
   B) 15 thousand bottles of wine
   C) 9 thousand bottles of wine
   D) 6 tons of rice
   E) Nothing, it is a free lunch.

Answer: E
Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 3.2
Status: Old
AACSBS: Analytical thinking
21) The above figure shows the production possibility frontier for a country. What is the opportunity cost per ton of rice to move from point B to point D?
   A) 1000 bottles of wine
   B) 500 bottles of wine
   C) 2 bottles of wine
   D) 1/2 of a bottle of wine
   E) None of the above answers is correct.

   Answer: B

   Topic: Opportunity cost
   Skill: Level 3: Using models
   Section: Checkpoint 3.2
   Status: Old
   AACSB: Analytical thinking

22) The above figure shows the production possibility frontier for a country. What is the opportunity cost per ton of rice to move from point D to E?
   A) 3000 bottles of wine
   B) 333 bottles of wine
   C) 3 bottles of wine
   D) 1/3 of a bottle of wine
   E) None of the above answers is correct.

   Answer: A

   Topic: Opportunity cost
   Skill: Level 3: Using models
   Section: Checkpoint 3.2
   Status: Old
   AACSB: Analytical thinking

23) The above figure shows the production possibility frontier for a country. What is the opportunity cost to move from point D to point E?
   A) 6 thousand bottles of wine
   B) 15 thousand bottles of wine
   C) 6 tons of rice
   D) 9 thousand bottles of wine
   E) Nothing, it is a free lunch.

   Answer: D

   Topic: Opportunity cost
   Skill: Level 3: Using models
   Section: Checkpoint 3.2
   Status: Old
   AACSB: Analytical thinking
24) The above figure shows the production possibility frontier for a country. What is the opportunity cost to move from point D to point B?
   A) 12 tons of rice  
   B) 15 thousand bottles of wine  
   C) 6 thousand bottles of wine  
   D) 9 thousand bottles of wine  
   E) Nothing, it is a free lunch.

Answer: A

25) Moving from a point inside the production possibilities frontier to a point on the production possibilities frontier, the opportunity cost of producing more of the good on the horizontal axis
   A) increases.  
   B) decreases.  
   C) is constant.  
   D) is 0.  
   E) is infinite.

Answer: D

26) Consider a production possibility frontier with jeans on the vertical axis and shoes on the horizontal axis. As a country moves along the frontier closer to the vertical axis,
   A) the opportunity cost of producing jeans increases.  
   B) the opportunity cost of producing shoes increases.  
   C) there are fewer tradeoffs.  
   D) inefficient production occurs.  
   E) the opportunity cost of producing jeans decreases.

Answer: A
27) Suppose that in a PPF graph, wheat is on the vertical axis and jets are on the horizontal axis. Moving down along the PPF, the
   A) number of jets increases and the opportunity cost of jets increases.
   B) amount of wheat increases and the opportunity cost of wheat increases.
   C) number of jets increases and the opportunity cost of jets decreases.
   D) amount of wheat increases and opportunity cost of wheat decreases.
   E) opportunity cost of jets and wheat both increase.
Answer: A

Topic: Opportunity cost
Skill: Level 4: Applying models
Section: Checkpoint 3.2
Status: Old
AACSB: Reflective thinking

28) Why is a production possibilities frontier bowed out (concave)?
   A) The bowed shape reflects constant opportunity cost.
   B) The bowed shape reflects decreasing opportunity cost.
   C) The bowed shape indicates that opportunity cost at first decreases at a decreasing rate, and then begins to decrease at an increasing rate.
   D) The bowed shape indicates that opportunity cost at first increases at a decreasing rate, and then begins to increase at an increasing rate.
   E) The bowed shape reflects increasing opportunity cost.
Answer: E

Topic: Increasing opportunity costs
Skill: Level 2: Using definitions
Section: Checkpoint 3.2
Status: Old
AACSB: Reflective thinking

29) The bowed out (concave) shape of the production possibilities curve implies that as production of one good
   A) increases, society must forgo increasing amounts of another good.
   B) increases, society must forgo decreasing amounts of another good.
   C) decreases, production of other goods decreases as well.
   D) increases, production of other goods increases as well.
   E) increases, society can obtain a free lunch.
Answer: A

Topic: Increasing opportunity costs
Skill: Level 2: Using definitions
Section: Checkpoint 3.2
Status: Old
AACSB: Reflective thinking
30) The idea of increasing opportunity cost is reflected in the
   A) bowed out shape of the production possibilities frontier.
   B) bowed in shape of the production possibilities frontier.
   C) linear shape of the production possibilities frontier.
   D) positive slope of the production possibilities frontier.
   E) fact that the PPF shows there are unattainable production points.

Answer: A

Topic: Increasing opportunity costs
Skill: Level 2: Using definitions
Section: Checkpoint 3.2
Status: Old
AACSB: Reflective thinking

31) A bowed out production possibilities frontier shows
   A) that resources are equally productive in all uses.
   B) increasing opportunity cost.
   C) that resources are not equally productive in all uses.
   D) Both answers B and C are correct.
   E) Both answers A and B are correct.

Answer: D

Topic: Increasing opportunity costs
Skill: Level 2: Using definitions
Section: Checkpoint 3.2
Status: Old
AACSB: Reflective thinking

32) The opportunity cost of a good increases as more of it is produced because
   A) there is no such thing as a free lunch.
   B) resources are not equally productive in all activities.
   C) producing more of a good requires additional resources.
   D) the number of forgone alternatives also increases.
   E) people want the good less as more is produced.

Answer: B

Topic: Increasing opportunity costs
Skill: Level 2: Using definitions
Section: Checkpoint 3.2
Status: Old
AACSB: Reflective thinking
33) As an economy increasingly specializes in producing one good, the opportunity cost of that good increases. The opportunity cost increases because
   A) resources are not equally productive in all activities.
   B) what must be paid to resources increases.
   C) human wants are virtually unlimited.
   D) not all goods are equally valuable.
   E) as more of a good is produced, the profit from its production must rise.

Answer: A

Topic: Increasing opportunity costs
Skill: Level 2: Using definitions
Section: Checkpoint 3.2
Status: Old
AACS: Reflective thinking

34) As an economy produces more of one of the goods on a bowed out production possibilities frontier, what happens to the opportunity cost of producing the good?
   A) It remains constant.
   B) It decreases.
   C) It increases.
   D) It might increase, decrease, or remain constant depending on how much people value the additional units of the good.
   E) None of these depicts what happens to opportunity cost.

Answer: C

Topic: Increasing opportunity costs
Skill: Level 3: Using models
Section: Checkpoint 3.2
Status: Old
AACS: Reflective thinking

35) When a production possibilities frontier is bowed outward, as more of one good is produced, its opportunity cost
   A) increases.
   B) decreases.
   C) remains constant.
   D) might increase, decrease, or remain constant depending on how much people value the additional units of the good.
   E) cannot be predicted.

Answer: A

Topic: Increasing opportunity costs
Skill: Level 3: Using models
Section: Checkpoint 3.2
Status: Old
AACS: Reflective thinking
36) A bowed out PPF reflects which of the following ideas?
   i. Increasing opportunity cost
   ii. Resources are not equally productive in all activities.
   iii. Prices of goods increase over time.
   A) i only
   B) i and ii
   C) i and iii
   D) ii and iii
   E) i, ii, and iii
   Answer: B

37) If there is increasing opportunity cost, then when moving downward on a production possibilities frontier, the opportunity cost of the good on the horizontal axis _______ as more of the good is produced.
   A) increases and the PPF gets steeper
   B) increases and the PPF gets flatter
   C) decreases and the PPF gets steeper
   D) decreases and the PPF gets flatter
   E) does not change and the PPF gets steeper
   Answer: A

38) A bowed out production possibility frontier shows that the
   A) opportunity cost of a good is constant as more of the good is produced.
   B) opportunity cost of a good decreases as more of the good is produced.
   C) opportunity cost of a good increases as more of the good is produced.
   D) opportunity cost relationship is linear.
   E) opportunity cost of producing another good is negative.
   Answer: C
39) Why does a nation experience increasing opportunity cost?
   A) As the nation moves from a production point within the PPF to one on the PPF, opportunity costs increase.
   B) As the nation moves from a production point within the PPF to another point also within the PPF, opportunity costs increase.
   C) When the amount of resources increases, the opportunity cost of all goods and services increases.
   D) Resources are not equally productive in producing different kinds of goods and services.
   E) Because the nation cannot produce at the unattainable production points that lie beyond the PPF.
Answer: D

Topic: Increasing opportunity costs
Skill: Level 2: Using definitions
Section: Checkpoint 3.2
Status: Old
AACSB: Reflective thinking

40) The fact of increasing opportunity cost when moving on the PPF means that
   A) to increase the production of one product requires larger and larger sacrifices of the other good.
   B) to decrease the production of one product requires smaller and smaller sacrifices of the other good.
   C) to increase the production of one product requires smaller and smaller sacrifices of the other good.
   D) when the government forces a movement from one point on the PPF to another point, no production is lost.
   E) the PPF will be a negatively sloped straight line.
Answer: A

Topic: Increasing opportunity costs
Skill: Level 3: Using models
Section: Checkpoint 3.2
Status: Old
AACSB: Reflective thinking

41) Production possibilities frontiers usually curve out and away from the origin. The implication of this curvature is that
   A) as resources are used to produce one good, fewer resources are available to produce another good.
   B) the opportunity cost of producing a good goes down as more of that good is produced.
   C) technological change is present.
   D) the opportunity cost of producing a good stays the same regardless of how much of that good is produced.
   E) some resources are better at producing one good while other resources are better at producing alternative goods.
Answer: E

Topic: Increasing opportunity costs
Skill: Level 3: Using models
Section: Checkpoint 3.2
Status: New
AACSB: Reflective thinking
42) If the production possibilities frontier between two goods were a straight line, then the opportunity cost of one good in terms of another would be
   A) constant.
   B) increasing.
   C) decreasing.
   D) zero.
   E) either constant, increasing, or decreasing but more information is needed to determine which.

   Answer: A

   Topic: Increasing opportunity costs
   Skill: Level 4: Applying models
   Section: Checkpoint 3.2
   Status: Old
   AACS: Reflective thinking

43) If the production possibilities frontier between two goods is a straight line, then the
   A) opportunity cost is not a ratio.
   B) resources are equally productive in both goods.
   C) line does not qualify as a production possibilities frontier because the unattainable production points are too close to the inefficient production points.
   D) Both answers A and C are correct.
   E) Both answers A and B are correct.

   Answer: B

   Topic: Increasing opportunity costs
   Skill: Level 4: Applying models
   Section: Checkpoint 3.2
   Status: Old
   AACS: Reflective thinking

44) As an economy moves down along a straight line production possibilities frontier, what happens to the opportunity cost of producing the good on the horizontal axis?
   A) It remains constant.
   B) It decreases.
   C) It increases.
   D) Above the midpoint it decreases until it equals 1 at the midpoint, and then it increases.
   E) None of these depict what happens to opportunity cost.

   Answer: A

   Topic: Opportunity cost
   Skill: Level 4: Applying models
   Section: Checkpoint 3.2
   Status: Old
   AACS: Analytical thinking
45) If the production possibilities frontier between bottled water and water in a jug is a straight line, which of the following statements would be correct?
   A) A large amount of unemployment must exist.
   B) Resources are equally productive at producing either product.
   C) There is no tradeoff between the two goods.
   D) There is no decrease in the production of one good when the production of the other is increased.
   E) Producing more of one good gives the economy a free lunch.

Answer: B

46) The table above shows the production possibilities for an economy. Drawing a PPF with books on the vertical axis and bread on the horizontal axis, a movement from possibility B to possibility C to possibility D shows the opportunity cost of ______ moving down along the PPF.
   A) books is decreasing
   B) bread is decreasing
   C) bread is increasing
   D) books is constant
   E) books and bread are both increasing

Answer: C
47) The table above shows the production possibilities for an economy. The opportunity cost of a loaf of bread is ________ when moving from possibility B to possibility C.
   A) 1/2 of a book
   B) 2 books
   C) 200 books
   D) 100 loaves of bread
   E) 1 loaf of bread
Answer: B

48) The table above presents the production possibilities frontier for a nation. Using the information in the table, moving from possibility C to B means that
   A) 4 units of capital goods are given up to get 55 units of consumption goods.
   B) 2 units of capital goods are given up to get 55 additional units of consumption goods.
   C) 4 units of capital goods are given up to get 10 additional units of consumption goods.
   D) 4 units of capital goods are given up to get 45 units of consumption goods.
   E) 2 units of capital goods are given up to get 10 additional units of consumption goods.
Answer: E

49) The table above presents the production possibilities frontier for a nation. Using the information in the table, when moving from possibility C to D, the cost of 1 unit of a capital good in terms of the consumption goods forgone is ________ consumption goods per capital good.
   A) 25
   B) 15
   C) 20
   D) 10
   E) an undefined amount of
Answer: D
50) The table above presents the production possibilities frontier for a nation. Using the information in the table, when moving from possibility A to B to C to ultimately E, the cost of a unit of capital goods in terms of consumption goods
   A) increases.
   B) decreases.
   C) remains the same.
   D) decreases from possibility A to C, and then increases from possibility C to D.
   E) cannot be calculated.

Answer: A

51) The figure above illustrates a small country’s production possibilities frontier. Based on the figure, we can tell that the nation’s resources are
   A) equally productive in all tasks because the slope is negative.
   B) equally productive in all tasks because the production possibilities frontier is bowed out.
   C) not equally productive in all tasks because the slope is negative.
   D) not equally productive in all tasks because the production possibilities frontier is bowed out.
   E) unlimited because the slope is negative and the PPF is bowed out.

Answer: D
52) The figure above illustrates a small country’s production possibilities frontier. Moving from point A to point B, the per unit opportunity cost of a tablet is ________ per tablet.
   A) 2 computers
   B) 4/3 of a computer
   C) 100 computers
   D) 1/2 of a computer
   E) 1 tablet
   Answer: A
   Topic: Opportunity cost
   Skill: Level 3: Using models
   Section: Checkpoint 3.2
   Status: Old
   AACSB: Analytical thinking

53) The figure above illustrates a small country’s production possibilities frontier. Moving from point C to point B, the per unit opportunity cost of computers is ________ per computer.
   A) 4 tablets
   B) 5/4 of a tablet
   C) 4/5 of a tablet
   D) 1/4 of a tablet
   E) 1 computer
   Answer: D
   Topic: Opportunity cost
   Skill: Level 3: Using models
   Section: Checkpoint 3.2
   Status: Old
   AACSB: Analytical thinking
54) The figure above shows the production possibilities frontier for a country. In order for it to move from producing at point A to producing at point B, the country would need to
   A) decrease SUV production by 1 million.
   B) decrease SUV production by 3 million.
   C) decrease SUV production by 4 million.
   D) decrease compact car production by 3 million.
   E) acquire more resources and/or more advanced technology.

Answer: A

Topic: Opportunity cost
Skill: Level 2: Using definitions
Section: Checkpoint 3.2
Status: Old
AACSB: Analytical thinking

55) The figure above shows the production possibilities frontier for a country. In order for it to move from producing at point A to producing at point B, the country would need to incur an opportunity cost of
   A) 1 million SUVs.
   B) 3 million SUVs.
   C) 4 million SUVs.
   D) 3 million compact cars.
   E) 0 because the gain in compact cars exceeds the loss in SUVs.

Answer: A

Topic: Opportunity cost
Skill: Level 2: Using definitions
Section: Checkpoint 3.2
Status: Old
AACSB: Analytical thinking
56) The figure above shows the production possibilities frontier for a country. How does the opportunity cost of compact cars forgone per SUV gained moving from point C to point B compare with the movement from point B to point A?
   A) The opportunity cost of moving from point C to point B is greater than the movement from point B to point A.
   B) The opportunity cost of moving from point C to point B is the same as the movement from point B to point A.
   C) The opportunity cost of moving from point C to point B is less than the movement from point B to point A.
   D) The opportunity costs cannot be compared because the units of moving from point C to point B differ from the units of moving from point B to point A.
   E) More information is needed to determine how the two opportunity costs compare.

Answer: C

57) Once you find the opportunity cost of producing one unit of a good, to find the opportunity cost of producing the other good, you must
   A) take the inverse.
   B) multiply by the total amount produced of the second good.
   C) divide by the total amount produced of the second good.
   D) do nothing because the opportunity cost for the first good is the same as the opportunity cost for the second good.
   E) None of the answers is correct.

Answer: A

58) While moving on the production possibilities frontier, if the opportunity cost of producing one good is 1/2, the opportunity cost of producing the other good (in the same range) is
   A) 1/2.
   B) 1/4.
   C) 2.
   D) 4.
   E) an amount that cannot be calculated without more information.

Answer: C
59) The opportunity cost of producing more of one good on a production possibilities frontier is
   A) a dollar amount.
   B) a ratio of quantities.
   C) a ratio of prices.
   D) equal to the area inside the production possibilities frontier.
   E) a theoretical concept which cannot be measured.

Answer: B
Topic: Opportunity cost is a ratio
Skill: Level 2: Using definitions
Section: Checkpoint 3.2
Status: Old
AACSB: Analytical thinking

60) The opportunity cost of one more slice of pizza in terms of sodas is the
   A) number of pizza slices we have to give up in order to get one extra soda.
   B) number of sodas we have to give up in order to get one extra pizza slice.
   C) total number of sodas that we have divided by the total number of pizza slices that we have.
   D) total number of pizza slices that we have divided by the total number of sodas that we have.
   E) price of a pizza slice minus the price of a soda.

Answer: B
Topic: Opportunity cost
Skill: Level 1: Definition
Section: Checkpoint 3.2
Status: Old
AACSB: Reflective thinking

61) Moving between two points on a PPF, a country gains 6 automobiles and forgoes 3 trucks. The opportunity cost of 1 automobile is
   A) 3 trucks.
   B) 6 automobiles – 3 trucks.
   C) 2 trucks.
   D) 1/2 of a truck.
   E) 1 automobile.

Answer: D
Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 3.2
Status: Old
AACSB: Analytical thinking
62) Moving between two points on a PPF, a country gains 8 desktop computers and forgoes 4 laptop computers. The opportunity cost of 1 desktop computer is
   A) 4 laptops.
   B) 8 desktops.
   C) 1 desktop.
   D) 2 laptops.
   E) 1/2 of a laptop.
   Answer: E

63) A country produces only cans of soup and ink pens. If the country produces on its bowed outward PPF and increases the production of cans of soup, the opportunity cost of additional
   A) cans of soup is increasing.
   B) cans of soup is decreasing.
   C) cans of soup remains unchanged.
   D) ink pens is increasing.
   E) More information is needed to determine what happens to the opportunity cost.
   Answer: A

64) Moving along a country’s PPF, a reason opportunity costs increase is that
   A) unemployment decreases as a country produces more and more of one good.
   B) unemployment increases as a country produces more and more of one good.
   C) technology declines as a country produces more and more of one good.
   D) some resources are better suited for producing one good rather than the other.
   E) technology must advance in order to produce more and more of one good.
   Answer: D
65) Increasing opportunity cost exists
   A) in the real world.
   B) as long as there is high unemployment.
   C) only in theory but not in real life.
   D) for a country but not for an individual.
   E) inside the PPF but not on the PPF.

Answer: A

Topic: Increasing opportunity costs
Skill: Level 1: Definition
Section: Checkpoint 3.2
Status: Old
AACSB: Reflective thinking

3.3 Economic Growth

1) Which of the following is the best definition of economic growth?
   A) the investment in capital and consumption goods by an economy
   B) the opportunity cost of capital
   C) the opportunity cost of consumption
   D) increased development of land and entrepreneurship
   E) the sustained expansion of production possibilities

Answer: E

Topic: Economic growth
Skill: Level 1: Definition
Section: Checkpoint 3.3
Status: Old
AACSB: Reflective thinking

2) The sustained expansion of production possibilities is called
   A) economic investment.
   B) production expansion.
   C) opportunity cost of growth.
   D) economic growth.
   E) production possibilities.

Answer: D

Topic: Economic growth
Skill: Level 1: Definition
Section: Checkpoint 3.3
Status: Old
AACSB: Reflective thinking
3) Which of the following would most likely cause a country's production possibilities set to shift outward at every point along the frontier?
   A) a decrease in idle capital
   B) a decrease in unemployment
   C) a technological advance in only one sector of the economy
   D) a general technological advance that affects all sectors of the economy
   E) none of the above

Answer: D

Topic: Economic growth and the PPF
Skill: Level 3: Using models
Section: Checkpoint 3.3
Status: New
AACSB: Analytical thinking

4) Consider a PPF with consumption goods on the horizontal axis and capital goods on the vertical axis. If the country operates on its PPF near its ______ axis, this country ______.
   A) vertical; will experience greater economic growth
   B) vertical; will not face opportunity costs
   C) horizontal; will have a larger chance at economic growth
   D) horizontal; faces larger tradeoffs
   E) vertical; is operating at an inefficient point

Answer: A

Topic: Economic growth and the PPF
Skill: Level 3: Using models
Section: Checkpoint 3.3
Status: Old
AACSB: Analytical thinking

5) Economic growth depends upon which of the following?
   i. Increasing the quantity of labor
   ii. Lowering the prices of goods and services
   iii. Advancing technology
       A) i only
       B) ii only
       C) iii only
       D) i and iii
       E) i, ii, and iii

Answer: D

Topic: Economic growth
Skill: Level 1: Definition
Section: Checkpoint 3.3
Status: Old
AACSB: Reflective thinking
6) Economic growth depends upon which of the following?
i. Improving the quality of labor
ii. Technological advancement
iii. Increasing the amount of capital
   A) i only
   B) ii only
   C) iii only
   D) i and iii
   E) i, ii, and iii
Answer: E

7) As an economy grows,
   A) its PPF shifts outward.
   B) it can eliminate scarcity.
   C) the opportunity cost of production will approach 0.
   D) the opportunity cost of production will increase.
   E) its PPF does not shift; instead, the production point moves from inside the PPF to be
      closer to the PPF.
Answer: A

8) The opportunity cost of economic growth is
   A) 0, because it means an expansion of production possibilities.
   B) the decrease in the current production of productive factors.
   C) a slower accumulation of human capital.
   D) the decrease in the current production of consumption goods.
   E) the increase in the nation’s capital stock and/or its technology.
Answer: D
9) What is the opportunity cost of economic growth?
   A) current period consumption goods
   B) current period capital goods
   C) land
   D) both current period consumption and capital goods
   E) both current period capital goods and land

Answer: A

Topic: Economic growth, opportunity cost
Skill: Level 2: Using definitions
Section: Checkpoint 3.3
Status: Old
AACSB: Reflective thinking

10) The above figure shows the PPF for a country that produces computers and computer factories. Which of the following would most likely shift the PPF from PPF₀ in one year to PPF₁ in the next?
   A) Nothing, because the PPF does not shift.
   B) Increase the production of computers from 9 million (at point C) to 11 million (at point B).
   C) Decrease the production of computers from 11 million (at point B) to 9 million (at point C) and build 9 new computer factories.
   D) Increase consumption of both computers and computer factories.
   E) Decrease production of both computers and computer factories by moving into the interior of the PPF.

Answer: C

Topic: Economic growth
Skill: Level 3: Using models
Section: Checkpoint 3.3
Status: Old
AACSB: Analytical thinking
11) The above figure shows the PPF for a country that produces computers and computer factories. The nation’s production possibilities frontier is $PPF_0$. At which of the following production points would the economy grow most rapidly?

A) Point A  
B) Point B  
C) Point C  
D) It makes no difference among the three points because they are all production efficient.  
E) More information is needed to answer the question.

Answer: A  

Topic: Economic growth  
Skill: Level 3: Using models  
Section: Checkpoint 3.3  
Status: Old  
AACSB: Analytical thinking

12) Suppose Puerto Rico and Hawaii currently have the same production possibilities so that the above figure is the PPF for hotels and consumption goods in the two areas. Hotels are a capital good that, once built, will help produce still more consumption goods. If Puerto Rico produces more hotels than Hawaii,

A) Hawaii’s PPF will shift outward further than Puerto Rico’s PPF.  
B) Hawaii’s PPF will shift inward.  
C) Puerto Rico’s PPF will not shift.  
D) Puerto Rico’s and Hawaii’s PPF will shift outward by the same amount.  
E) Puerto Rico’s PPF will shift outward further than Hawaii’s PPF.

Answer: E  

Topic: Economic growth  
Skill: Level 3: Using models  
Section: Checkpoint 3.3  
Status: Old  
AACSB: Analytical thinking
13) Suppose Puerto Rico and Hawaii currently have the same production possibilities so that the above figure is the PPF for hotels and consumption goods in the two areas. Hotels are a capital good that, once built, will help produce still more consumption goods. According to the figure, which island will have more rapid economic growth?
   A) Hawaii
   B) Both Hawaii and Puerto Rico will grow at the same speed.
   C) Puerto Rico
   D) Neither Hawaii nor Puerto Rico will grow.
   E) More than one of the above answers is correct.

Answer: C

Topic: Economic growth
Skill: Level 3: Using models
Section: Checkpoint 3.3
Status: Old
AACS: Analytical thinking

14) Suppose India and France have the same PPF, shown in the figure above. Based on their current production points, which is India’s most likely future PPF?
   A) PPF2
   B) PPF1
   C) PPF0
   D) either PPF0 or PPF1
   E) None of the above because economic growth will not happen in India.

Answer: A

Topic: Economic growth
Skill: Level 3: Using models
Section: Checkpoint 3.3
Status: Old
AACS: Analytical thinking
15) Suppose India and France have the same PPF, shown in the figure above. Based on their current production points, which is France's most likely future PPF?
   A) PPF₂
   B) PPF₁
   C) PPF₀
   D) either PPF₀ or PPF₁
   E) None of the above because economic growth will not happen in India.

Answer: B

16) Suppose India and France have the same PPF, shown in the figure above. Based on their current production points, India's most likely future PPF is ________, and France's most likely future PPF is ________.
   A) PPF₁; PPF₁
   B) PPF₂; PPF₂
   C) PPF₀; PPF₀
   D) PPF₂; PPF₁
   E) PPF₁; PPF₂

Answer: D
17) Suppose that Germany, France, Estonia, and India all have the same production possibilities, illustrated in the figure above. Based on the production points in the figure, which country is most likely to expand its PPF to PPF₃?

A) India  
B) Germany  
C) Estonia  
D) France and Germany equally  
E) France

Answer: B

Topic: Economic growth  
Skill: Level 3: Using models  
Section: Checkpoint 3.3  
Status: Old  
AACSBS: Analytical thinking

18) Suppose that Germany, France, Estonia, and India all have the same production possibilities, illustrated in the figure above. Based on the production points in the figure, which country is most likely to expand its PPF to PPF₁?

A) France and Germany equally  
B) India  
C) Estonia  
D) France  
E) Germany

Answer: B

Topic: Economic growth  
Skill: Level 3: Using models  
Section: Checkpoint 3.3  
Status: Old  
AACSBS: Analytical thinking
19) Suppose that Germany, France, Estonia, and India all have the same production possibilities, illustrated in the figure above. Based on the production points in the figure, India is most likely to expand its PPF to
   A) $PPF_3$ or $PPF_2$.
   B) $PPF_3$.
   C) $PPF_1$.
   D) $PPF_1$, or $PPF_2$.
   E) $PPF_2$.
Answer: C

Topic: Economic growth
Skill: Level 3: Using models
Section: Checkpoint 3.3
Status: Old
AACSB: Analytical thinking

20) Suppose that Germany, France, Estonia, and India all have the same production possibilities, illustrated in the figure above. Based on the production points in the figure, Germany is most likely to expand its PPF to
   A) $PPF_3$ or $PPF_2$.
   B) $PPF_3$.
   C) $PPF_1$.
   D) $PPF_1$, or $PPF_2$.
   E) $PPF_2$.
Answer: B

Topic: Economic growth
Skill: Level 3: Using models
Section: Checkpoint 3.3
Status: Old
AACSB: Analytical thinking

21) To increase its economic growth, a nation should
   A) limit the number of people in college because they produce nothing.
   B) encourage spending on goods and services.
   C) encourage education because that increases the quality of labor.
   D) increase current consumption.
   E) eliminate expenditure on capital goods.
Answer: C

Topic: Economic growth
Skill: Level 2: Using definitions
Section: Checkpoint 3.3
Status: Old
AACSB: Reflective thinking
22) Other things equal, if Mexico devotes more resources to train its population than Spain, 
   A) Mexico will be able to eliminate opportunity cost faster than Spain. 
   B) Mexico will be able to eliminate scarcity faster than Spain. 
   C) Spain will grow faster than Mexico. 
   D) Mexico will have more current consumption than Spain. 
   E) Mexico will grow faster than Spain. 
   Answer: E 
   Topic: Economic growth 
   Skill: Level 3: Using models 
   Section: Checkpoint 3.3 
   Status: Old 
   AACSBS: Reflective thinking 

23) If a nation devotes a larger share of its current production to consumption goods, then 
   A) its economic growth will slow down. 
   B) its PPF will shift outward. 
   C) its PPF will shift inward. 
   D) some productive factors will become unemployed. 
   E) it must produce at a point within its PPF. 
   Answer: A 
   Topic: Economic growth 
   Skill: Level 3: Using models 
   Section: Checkpoint 3.3 
   Status: Old 
   AACSBS: Reflective thinking 

24) Which of the following statements is correct? 
   i. As the economy grows, the opportunity costs of economic growth decrease. 
   ii. Economic growth has no opportunity cost. 
   iii. The opportunity cost of economic growth is current consumption forgone. 
   A) i only B) ii only C) iii only D) i and iii E) i and ii 
   Answer: C 
   Topic: Economic growth 
   Skill: Level 3: Using models 
   Section: Checkpoint 3.3 
   Status: Old 
   AACSBS: Reflective thinking 

25) When a country’s production possibilities frontier shifts outward over time, the country is experiencing 
   A) no opportunity cost. 
   B) economic growth. 
   C) higher unemployment of resources. 
   D) a decrease in unemployment of resources. 
   E) an end to opportunity cost. 
   Answer: B 
   Topic: Economic growth 
   Skill: Level 1: Definition 
   Section: Checkpoint 3.3 
   Status: Old 
   AACSBS: Reflective thinking
26) The opportunity cost of economic growth is ________ and the benefit of economic growth is ________.
   A) increased current consumption; increased future consumption
   B) increased current consumption; decreased future consumption
   C) decreased current consumption; increased future consumption
   D) decreased current consumption; decreased future consumption
   E) nothing; increased future consumption

   Answer: C

   Topic: Economic growth
   Skill: Level 1: Definition
   Section: Checkpoint 3.3
   Status: Old
   AACSB: Reflective thinking

3.4 Specialization and Trade

1) If Wendy can produce more of all goods than Tommy in an hour, then
   A) Wendy has an absolute advantage in all goods.
   B) Wendy does not need to trade with Tommy in order to achieve the gains from trade.
   C) Wendy has a comparative advantage in all goods.
   D) Tommy has an absolute advantage in all goods.
   E) Only Tommy, but not Wendy, can benefit from trade between the two of them.

   Answer: A

   Topic: Absolute advantage
   Skill: Level 1: Definition
   Section: Checkpoint 3.4
   Status: Old
   AACSB: Reflective thinking

2) Mac can bake more cookies than Monica per hour. It must be true that
   A) Monica has an absolute advantage in cookie baking.
   B) Mac has an absolute advantage in baking cookies.
   C) Mac has a comparative advantage in baking cookies.
   D) Monica has a comparative advantage in baking cookies.
   E) Mac cannot benefit by trade between the two of them.

   Answer: B

   Topic: Absolute advantage
   Skill: Level 3: Using models
   Section: Checkpoint 3.4
   Status: Old
   AACSB: Reflective thinking
3) When Mik has an absolute advantage in the production of two goods over Tommy, Mik
A) is less productive than Tommy.
B) is better off if he does not engage in specialization and trade with Tommy.
C) is more productive in producing both goods than Tommy.
D) always has a comparative advantage over Tommy in the production of both goods.
E) cannot gain from trade with Tommy.

Answer: C

Topic: Absolute advantage
Skill: Level 1: Definition
Section: Checkpoint 3.4
Status: Old
AACSBB: Reflective thinking

4) If John can produce 10 chairs or 20 lamps during a week while Mary can produce 12 chairs or 22 lamps in the same time, who has the absolute advantage in producing each good?
A) Mary in producing both goods
B) John in producing both goods
C) Mary in producing chairs, John in producing lamps
D) John in producing chairs, Mary in producing lamps
E) Both Mary and John in both goods

Answer: A

Topic: Absolute advantage
Skill: Level 2: Using definitions
Section: Checkpoint 3.4
Status: Old
AACSBB: Analytical thinking

5) If Toni has an absolute advantage in both sewing and ironing when compared to Tom, then
A) they might benefit from trading, but we need more information to determine in which task they should specialize.
B) neither Toni nor Tom can benefit from trading with each other.
C) Toni should specialize in sewing, and Tom should specialize in ironing.
D) Toni cannot benefit from trading with Tom, but Tom can benefit from trading with Toni.
E) Tom cannot benefit from trading with Toni, but Toni can benefit from trading with Tom.

Answer: A

Topic: Absolute advantage
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSBB: Reflective thinking
6) If a country has
   A) an absolute advantage in producing a good, it definitely also has a comparative advantage in producing that good.
   B) an absolute advantage in producing a good, it might or might not have a comparative advantage in producing that good.
   C) a comparative advantage in production of a good, it must also have an absolute advantage in producing that good.
   D) an absolute advantage in producing a good, it definitely will not have a comparative advantage in producing that good.
   E) None of the above answers is correct.
   Answer: B

7) Hank requires 1 hour to cut the grass and 3 hours to clean the house. His sister Holly requires 1 hour to cut the grass and 4 hours to clean the house. Which of the following statements is true?
   A) Hank has a comparative advantage in both cutting the grass and cleaning the house.
   B) Hank and Holly both have a comparative advantage in cutting the grass.
   C) Hank has a lower opportunity cost of cutting the grass.
   D) Hank has an absolute advantage in both cutting the grass and cleaning the house.
   E) Holly has a comparative advantage in cutting the grass.
   Answer: E

8) The United States can use all its resources to produce 250 DVDs or 500 shoes. China can use all of its resources to produce 30 DVDs or 300 shoes. The opportunity cost of producing a DVD in the United States is
   A) 2 shoes.
   B) 1/2 of a shoe.
   C) 20 shoes.
   D) 500 shoes.
   E) 1 DVD.
   Answer: A
<table>
<thead>
<tr>
<th>Mary’s production in 1 day</th>
<th>Mark’s production in 1 day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dresses</td>
<td>8</td>
</tr>
<tr>
<td>Jackets</td>
<td>12</td>
</tr>
</tbody>
</table>

9) In the table above, how many jackets must Mary forgo for every dress she makes?
   A) 12 jackets
   B) 3/4 of a jacket
   C) 2/3 of a jacket
   D) 1 1/2 jackets
   E) 8 jackets

Answer: D

Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSB: Analytical thinking

10) In the table above, how many jackets must Mark forgo for every dress he makes?
    A) 1 jacket
    B) 16 jackets
    C) 2/3 of a jacket
    D) 1 1/2 jackets
    E) 24 dresses

Answer: C

Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSB: Analytical thinking

11) In the above table, for Mary the opportunity cost of producing a dress is _______ and the opportunity cost for Mark of producing a dress is _______.
    A) 1 1/2 jackets; 2/3 of a jacket
    B) 1 1/2 jackets; 2 1/2 jackets
    C) 1 1/4 jackets; 1/2 of a jacket
    D) 1 jacket; 1 jacket
    E) 1 dress; 1 dress

Answer: A

Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSB: Analytical thinking
12) A country has a comparative advantage in the production of a good if it can
   A) produce more of the good than another country.
   B) produce more of the good most efficiently.
   C) produce the good on and remain on its production possibilities frontier.
   D) trade off producing the good for another good.
   E) produce the good at the lowest opportunity cost.

Answer: E

Topic: Comparative advantage
Skill: Level 1: Definition
Section: Checkpoint 3.4
Status: Old
AACS: Reflective thinking

13) Having a comparative advantage means a nation can
   A) benefit from trade.
   B) produce at a higher opportunity cost.
   C) produce more of the good.
   D) produce without incurring an opportunity cost.
   E) produce the good at a point beyond its PPF.

Answer: A

Topic: Comparative advantage
Skill: Level 1: Definition
Section: Checkpoint 3.4
Status: Old
AACS: Reflective thinking

14) When a person has a comparative advantage in producing a good or service, the person has
   A) a higher opportunity cost in producing that product than someone else.
   B) a constant opportunity cost in producing that product.
   C) a decreasing opportunity cost in producing that product.
   D) a lower opportunity cost in producing that product than someone else.
   E) an increasing marginal benefit in producing the good.

Answer: D

Topic: Comparative advantage
Skill: Level 1: Definition
Section: Checkpoint 3.4
Status: Old
AACS: Reflective thinking

15) Which of the following best describes comparative advantage?
   A) being able to produce more output than any other country
   B) using the fewest number of resources to produce a given amount of output
   C) having the largest number of resources compared to other countries
   D) forgoing the fewest units of one product to produce a unit of another product
   E) It is the same as absolute advantage.

Answer: D

Topic: Comparative advantage
Skill: Level 2: Using definitions
Section: Checkpoint 3.4
Status: Old
AACS: Reflective thinking
16) Which of the following is correct about comparative advantage?
   A) Some countries will have a comparative advantage in everything.
   B) Having a comparative advantage without an absolute advantage is impossible.
   C) A comparative advantage in a good means that the country can produce more of the
good than any other country.
   D) A country has a comparative advantage in the production of a good if it can produce the
good at lower opportunity cost than any other country.
   E) None of the above answers is correct.

   Answer: D
   Topic: Comparative advantage
   Skill: Level 3: Using models
   Section: Checkpoint 3.4
   Status: Old
   AACSB: Reflective thinking

17) John can make pizza at a lower opportunity cost than Allen, but Allen can make more pizzas
per day than John. Therefore,
   A) John cannot benefit from trade with Allen.
   B) Allen cannot benefit from trade with John.
   C) John has a comparative advantage in pizza.
   D) John has an absolute advantage in pizza.
   E) Allen has a comparative advantage in pizza.

   Answer: C
   Topic: Comparative advantage
   Skill: Level 2: Using definitions
   Section: Checkpoint 3.4
   Status: Old
   AACSB: Reflective thinking

18) Alice and Gene work in the mailroom, sorting and delivering mail. In order for them to benefit
from specialization and trade, Alice must
   A) be able to both sort and deliver faster than Gene.
   B) be equally productive in both sorting and delivering.
   C) have a comparative advantage in both sorting and delivering.
   D) have a comparative advantage in one task and Gene must have a comparative advantage
   in the other task.
   E) be equally productive as Gene in both sorting and delivering.

   Answer: D
   Topic: Comparative advantage
   Skill: Level 2: Using definitions
   Section: Checkpoint 3.4
   Status: Old
   AACSB: Reflective thinking
19) When one person’s opportunity cost of producing a good is lower than another person’s 
opportunity cost of producing the same good, it is called 
   A) an absolute advantage.  
   B) a comparative advantage.  
   C) specialization.  
   D) production possibilities.  
   E) a tradeoff.  
Answer: B  
Topic: Comparative advantage  
Skill: Level 1: Definition  
Section: Checkpoint 3.4  
Status: Old  
AACS B: Reflective thinking  

20) For country Gamma the opportunity cost for producing 1 computer is 10 tons of steel. For 
country Beta the opportunity cost for producing 1 computer is 6 tons of steel. Which country 
has the comparative advantage in the production of steel? 
   A) Gamma  
   B) Beta  
   C) Both have the comparative advantage in the production of steel.  
   D) Neither country has the comparative advantage in the production of steel.  
   E) More information is needed to determine which of the two nations has the comparative 
advantage.  
Answer: A  
Topic: Comparative advantage  
Skill: Level 2: Using definitions  
Section: Checkpoint 3.4  
Status: Old  
AACS B: Analytical thinking  

21) For country North, the opportunity cost incurred when 3 tractors are produced is 21 watches. 
For country South, the opportunity cost incurred when 5 tractors are produced is 100 watches. 
Which country has the comparative advantage in the production of tractors? 
   A) North  
   B) South  
   C) Both have the comparative advantage in the production of tractors.  
   D) Neither country has the comparative advantage in the production of tractors.  
   E) More information is needed about which country has the comparative advantage in the 
production of watches.  
Answer: A  
Topic: Comparative advantage  
Skill: Level 2: Using definitions  
Section: Checkpoint 3.4  
Status: Old  
AACS B: Analytical thinking
22) If Country A can produce an extra plane by giving up two boats, and Country B can produce an extra plane by giving up three boats, then
A) Country A has a comparative advantage over Country B in the production of planes.
B) Country B has a comparative advantage over Country A in the production of planes.
C) The two countries have no incentive to trade with one another.
D) Country A would like to trade with B, but B cannot gain by trading with A.
E) Country A has an absolute advantage in producing planes and a comparative advantage in producing boats.

Answer: A

Topic: Comparative advantage
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSBS: Analytical thinking

23) David takes 10 minutes to process a customer, and 20 minutes to stock the shelves. Danny takes 15 minutes to process a customer, and 15 minutes to stock the shelves. Which of the following statements is true?
A) David has an absolute advantage in performing both tasks.
B) Danny has an absolute advantage in performing both tasks.
C) David has a comparative advantage in processing customers but not in stocking shelves.
D) Danny has a comparative advantage in processing customers but not in stocking shelves.
E) Danny has a comparative advantage in processing customers and in stocking shelves.

Answer: C

Topic: Comparative advantage
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSBS: Analytical thinking

24) Rika’s opportunity cost of producing 100 t-shirts is 50 jackets. Jeff’s opportunity cost of producing 75 t-shirts is 25 jackets. Who should specialize in jackets?
A) Rika
B) Jeff
C) neither
D) both
E) More information is needed about their production possibilities frontiers to determine who should specialize in jackets.

Answer: A

Topic: Comparative advantage
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSBS: Analytical thinking
25) On a typical acre of land, Iowa can produce either 300 pounds of beef or 100 pounds of soybeans in a year. On a typical acre of land, Nebraska can produce 150 pounds of beef or 200 pounds of soybeans. Which of the following is correct?
   A) Nebraska should produce soybeans because its opportunity cost of soybeans is lower.
   B) Nebraska should produce soybeans because its opportunity cost of soybeans is higher.
   C) Iowa should produce soybeans because its opportunity cost of soybeans is lower.
   D) Iowa should produce soybeans because its opportunity cost of soybeans is higher.
   E) Nebraska and Iowa should divide each acre evenly between soybean and beef production.

Answer: A

Topic: Achieving the gains from trade
Skill: Level 5: Critical thinking
Section: Checkpoint 3.4
Status: New
AACSBS: Analytical thinking

<table>
<thead>
<tr>
<th>Potatoes (pounds)</th>
<th>Tomatoes (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Huey</td>
<td>12 or 8</td>
</tr>
<tr>
<td>Steve</td>
<td>6 or 2</td>
</tr>
</tbody>
</table>

26) Huey and Steve can grow potatoes or tomatoes. The table above shows the pounds of potatoes and tomatoes Huey and Steve can grow in a week. Based on the table, Huey’s opportunity cost of producing one pound of tomatoes is
   A) 1.5 pounds of potatoes.
   B) 0.66 pound of potatoes.
   C) 0, because he has an absolute advantage in it.
   D) 0, because he has a comparative advantage in it.
   E) 1.0 pound of potatoes.

Answer: A

Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSBS: Analytical thinking

27) Huey and Steve can grow potatoes or tomatoes. The table above shows the pounds of potatoes and tomatoes Huey and Steve can grow in a week. Based on the table, Steve has a comparative advantage in
   A) both potatoes and tomatoes.
   B) neither potatoes nor tomatoes.
   C) potatoes.
   D) tomatoes.
   E) More information is needed about Huey’s comparative advantage in order to determine Steve’s comparative advantage.

Answer: C

Topic: Comparative advantage
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSBS: Analytical thinking
28) Huey and Steve can grow potatoes or tomatoes. The table above shows the pounds of potatoes and tomatoes Huey and Steve can grow in a week. Based on the table, which of the following statements is correct?

A) Steve has an absolute advantage in both potatoes and tomatoes.
B) Steve has a comparative advantage in both potatoes and tomatoes.
C) Steve has an absolute advantage in potatoes only.
D) Huey has an absolute advantage in potatoes only.
E) Huey has an absolute advantage in both potatoes and tomatoes.

Answer: E

Topic: Absolute advantage
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSB: Analytical thinking

29) If Tom can wax a car in fewer hours than Jerry, then Tom definitely has

A) a comparative advantage in car waxing.
B) an absolute advantage in car waxing.
C) both a comparative and an absolute advantage in car waxing.
D) neither a comparative nor an absolute advantage in car waxing.
E) an undetermined advantage because we do not know how long it takes Tom and Jerry to wash a car.

Answer: B

Topic: Comparative advantage versus absolute advantage
Skill: Level 2: Using definitions
Section: Checkpoint 3.4
Status: New
AACSB: Analytical thinking

<table>
<thead>
<tr>
<th>Jack's production possibilities</th>
<th>Jill's production possibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production point</td>
<td>Food (pounds)</td>
</tr>
<tr>
<td>A</td>
<td>24 and 0</td>
</tr>
<tr>
<td>B</td>
<td>16 and 4</td>
</tr>
<tr>
<td>C</td>
<td>8 and 8</td>
</tr>
<tr>
<td>D</td>
<td>0 and 12</td>
</tr>
</tbody>
</table>

30) In the table above, Jack’s opportunity cost for 1 pound of food is _______ and his opportunity cost for 1 pound of clothing is _______.

A) 1 pound of clothing; 4 pounds of food
B) 1/2 of a pound of clothing; 2 pounds of food
C) 1/3 of a pound of clothing; 3 pounds of food
D) 2 pounds of clothing; 2 pounds of food
E) 1 pound of food; 1 pound of clothing

Answer: B

Topic: Opportunity cost
Skill: Level 4: Applying models
Section: Checkpoint 3.4
Status: Old
AACSB: Analytical thinking
31) In the table above, Jill’s opportunity cost for 1 pound of food is _______ and her opportunity cost for 1 pound of clothing is _______.
   A) 1 pound of clothing; 4 pounds of food
   B) 1/2 of a pound of clothing; 2 pounds of food
   C) 1/3 of a pound of clothing; 3 pounds of food
   D) 2 pounds of clothing; 2 pounds of food
   E) 1 pound of food; 1 pound of clothing
Answer: C
Topic: Opportunity cost
Skill: Level 4: Applying models
Section: Checkpoint 3.4
Status: Old
AACSB: Analytical thinking

32) In the table above, Jack’s comparative advantage is producing _______ and Jill’s comparative advantage is producing _______.
   A) clothing; food
   B) clothing and food; nothing
   C) nothing; clothing and food
   D) food; clothing
   E) clothing; clothing
Answer: A
Topic: Comparative advantage
Skill: Level 4: Applying models
Section: Checkpoint 3.4
Status: Old
AACSB: Analytical thinking
33) Deb and Pete have volunteered to help their favorite charity mail out fundraiser information. The figure above shows their production possibilities frontiers for assembling packets and stuffing envelopes. If Deb spends all her time assembling packets, how many can she assemble?

A) 32  B) 40  C) 64  D) 160  E) 22

Answer: B

Topic: Production possibilities frontier
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSBS: Analytical thinking

34) Deb and Pete have volunteered to help their favorite charity mail out fundraiser information. The figure above shows their production possibilities frontiers for assembling packets and stuffing envelopes. What is Deb’s opportunity cost of assembling 1 packet?

A) 160 envelopes  B) 40 envelopes  C) 4 envelopes  D) 1/4 of an envelope  E) 4 packets

Answer: C

Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSBS: Analytical thinking
35) Deb and Pete have volunteered to help their favorite charity mail out fundraiser information. The figure above shows their production possibilities frontiers for assembling packets and stuffing envelopes. Which of the following statements is correct?
   A) Deb has a comparative advantage in assembling packets.
   B) Pete has an absolute advantage in both assembling packets and stuffing envelopes.
   C) Deb has a comparative advantage in stuffing envelopes.
   D) Deb has an absolute advantage in both assembling packets and stuffing envelopes.
   E) Deb has a comparative advantage in both assembling packets and stuffing envelopes.

Answer: C  
Topic: Comparative advantage  
Skill: Level 3: Using models  
Section: Checkpoint 3.4  
Status: Old  
AACSB: Analytical thinking

36) Deb and Pete have volunteered to help their favorite charity mail out fundraiser information. The figure above shows their production possibilities frontiers for assembling packets and stuffing envelopes. If Deb and Pete specialize and trade, how many packets will be assembled?
   A) 40
   B) more than 40 and less than 80
   C) 80
   D) 160
   E) more than 80 and less than 160

Answer: D  
Topic: Achieving the gains from trade  
Skill: Level 3: Using models  
Section: Checkpoint 3.4  
Status: Old  
AACSB: Analytical thinking
37) Gabriel operates a ranch in Idaho where he raises cattle and grows potatoes. The figure above illustrates his production possibilities frontier. What is Gabriel's opportunity cost of growing another ton of potatoes?
   A) 400 cows  
   B) 80 cows  
   C) 100 cows  
   D) 0 cows  
   E) 1 ton of potatoes

Answer: B

Topic: Opportunity cost  
Skill: Level 3: Using models  
Section: Checkpoint 3.4  
Status: Old  
AACSBA: Analytical thinking

38) Gabriel operates a ranch in Idaho where he raises cattle and grows potatoes. The figure above illustrates his production possibilities frontier. What is Gabriel's opportunity cost of raising another 100 cows?
   A) 1.25 tons of potatoes  
   B) 5.0 tons of potatoes  
   C) 3.0 tons of potatoes  
   D) 1.0 ton of potatoes  
   E) 100 cows

Answer: A

Topic: Opportunity cost  
Skill: Level 3: Using models  
Section: Checkpoint 3.4  
Status: Old  
AACSBA: Analytical thinking
39) In the above figure, Jack's opportunity cost of producing 1 gallon of soda is _______ of bottled water.
   A) 1 gallon
   B) 1/2 of a gallon
   C) 6 gallons
   D) 1/4 of a gallon
   E) 2 gallons

   Answer: E
   Topic: Opportunity cost
   Skill: Level 3: Using models
   Section: Checkpoint 3.4
   Status: Old
   AACSB: Analytical thinking

40) In the above figure, Jack's opportunity cost of producing 1 gallon of bottled water is _______ of soda.
   A) 2 gallons
   B) 1/2 of a gallon
   C) 6 gallons
   D) 1/4 of a gallon
   E) 1 gallon

   Answer: B
   Topic: Opportunity cost
   Skill: Level 3: Using models
   Section: Checkpoint 3.4
   Status: Old
   AACSB: Analytical thinking
41) In the above figure, Jill’s opportunity cost of producing 1 gallon of soda is _______ of bottled water.
   A) 2 gallons
   B) 1/2 of a gallon
   C) 4 gallons
   D) 1 gallon
   E) 1/4 of a gallon
Answer: D
Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACS: Analytical thinking

42) In the above figure, Jill’s opportunity cost of producing 1 gallon of bottled water is _______ of soda.
   A) 2 gallons
   B) 1/2 of a gallon
   C) 4 gallons
   D) 1 gallon
   E) 1/4 of a gallon
Answer: D
Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACS: Analytical thinking

43) Using the figure above, if Jack and Jill specialize and gain from trade, then
   A) Jack produces equal amounts of gallons of water and bottled water.
   B) Jack specializes in the production of bottled water.
   C) Jack and Jill produce beyond their PPF.
   D) Jack specializes in the production of soda.
   E) Jack specializes on the production of soda and water.
Answer: B
Topic: Achieving the gains from trade
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACS: Analytical thinking
44) The figure above shows the production possibilities frontiers for the United Kingdom and France. What is the opportunity cost of one bushel of wheat in France?
   A) 1/4 of a pound of fish
   B) 4 pounds of fish
   C) 1 pound of fish
   D) 100 pounds of fish
   E) 2 pounds of fish

   Answer: A

   Topic: Opportunity cost
   Skill: Level 3: Using models
   Section: Checkpoint 3.4
   Status: Old
   AACSB: Analytical thinking

45) The figure above shows the production possibilities frontiers for the United Kingdom and France. What is the opportunity cost of one bushel of wheat for the United Kingdom?
   A) 1/4 of a pound of fish
   B) 1/2 of a pound of fish
   C) 1 pound of fish
   D) 200 pounds of fish
   E) 2 pounds of fish

   Answer: C

   Topic: Opportunity cost
   Skill: Level 3: Using models
   Section: Checkpoint 3.4
   Status: Old
   AACSB: Analytical thinking
46) The figure above shows the production possibilities frontiers for the United Kingdom and France. If the United Kingdom and France specialize and engage in trade, the United Kingdom will produce _______ and France will produce _______.
   A) wheat; wheat  
   B) wheat; fish  
   C) fish; wheat  
   D) fish; fish  
   E) both wheat and fish; both wheat and fish
Answer: C
Topic: Achieving the gains from trade 
Skill: Level 3: Using models  
Section: Checkpoint 3.4 
Status: Old  
AACSB: Analytical thinking

47) The figure above shows the production possibilities frontiers for the United Kingdom and France. If the United Kingdom and France specialize and engage in trade, the United Kingdom will export _______ and France will export _______.
   A) wheat; wheat  
   B) wheat; fish  
   C) fish; wheat  
   D) fish; fish  
   E) nothing; nothing
Answer: C
Topic: Achieving the gains from trade 
Skill: Level 3: Using models  
Section: Checkpoint 3.4 
Status: Old  
AACSB: Analytical thinking

48) What is gained when people engage in specialization and trade?
   A) Specialization and trade allow people to consume outside their individual production possibilities frontiers.  
   B) Specialization and trade allow people to consume inside their production possibilities frontiers.  
   C) Specialization and trade allow people to consume at a point on their production possibilities frontiers.  
   D) Specialization and trade allow people to produce outside their individual production possibilities frontiers.  
   E) There are no gains from specialization and trade.
Answer: A
Topic: Achieving the gains from trade 
Skill: Level 2: Using definitions  
Section: Checkpoint 3.4  
Status: Old  
AACSB: Reflective thinking
49) Gains from trade
   A) occur when one party to the trade has an absolute advantage in both goods.
   B) result in being able to consume beyond the trading individuals’ production possibilities frontiers.
   C) occur when people do not specialize.
   D) occur when opportunity costs are equal.
   E) always benefit one party but not the other party of any trade.

Answer: B

Topic: Achieving the gains from trade
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSB: Reflective thinking

50) Consider the United States’ production of soy beans and running shoes. If the United States has an absolute advantage in the production of both goods compared to China,
   A) both countries can gain from trade.
   B) only the United States can gain from trade.
   C) only China can gain from trade.
   D) each country will be able to produce at a point beyond its PPF.
   E) only the United States will be able to operate beyond its PPF.

Answer: A

Topic: Achieving the gains from trade
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSB: Reflective thinking

51) To achieve gains from trade, a country
   A) needs to have an absolute advantage in the production of all goods.
   B) specializes in the producing a good in which it has a lower opportunity cost.
   C) must produce at a point beyond its PPF.
   D) should produce at the midpoint of its PPF.
   E) needs to have an absolute advantage in the production of at least one good.

Answer: B

Topic: Achieving the gains from trade
Skill: Level 2: Using definitions
Section: Checkpoint 3.4
Status: Old
AACSB: Reflective thinking
52) Specialization and trade
   A) does not benefit anyone.
   B) allows nations to produce inside their individual production possibilities frontier.
   C) allows nations to consume combinations of products that are outside their individual production possibilities frontier.
   D) shifts the production possibilities frontier inward.
   E) shifts the production possibilities frontier outward.

Answer: C

53) The United States is one of the richest nations in the world,
   A) so it does not need to trade with poor nations in order to achieve any gains from trade.
   B) so it might not have a comparative advantage in producing any goods.
   C) but it can still benefit from specialization and trade.
   D) so it must have a comparative advantage in the production of all goods.
   E) so it must have an absolute advantage in the production of all goods.

Answer: C

54) Specialization and trade make a country better off because with trade, the country can consume at a point
   A) outside its production possibilities frontier.
   B) inside its production possibilities frontier.
   C) on its production possibilities frontier.
   D) on its trading partner’s production possibilities frontier.
   E) inside its trading partner’s production possibilities frontier.

Answer: A
By specializing and trading, a country is able to
A) obtain the absolute advantage in the goods it produces.
B) consume but not to produce combinations of goods that lie beyond its production possibilities frontier.
C) produce but not to consume combinations of goods that lie beyond its production possibilities frontier.
D) both produce and consume combinations of goods that lie beyond its production possibilities frontier.
E) neither produce nor consume combinations of goods that lie beyond its production possibilities frontier.
Answer: B

With no international trade, a country _______ consume at a point outside of its PPF; with international trade, a country _______ consume at a point outside of its PPF.
A) cannot; can
B) can; cannot
C) can; can
D) cannot; cannot
E) None of the above answers is correct because the presence or absence of international trade has nothing to do with where a country consumes in comparison to its PPF.
Answer: A

In terms of a nation’s production possibilities frontier, what impact does international trade have?
A) International trade shifts the nation’s production possibilities frontier outward.
B) International trade shifts the nation’s production possibilities frontier inward.
C) International trade allows the nation to consume at a point outside its production possibilities frontier.
D) International trade shifts the production possibilities frontier outward for the goods that are exported and inward for the goods that are imported.
E) International trade shifts the production possibilities frontier outward for the goods that are imported and inward for the goods that are exported.
Answer: C
58) The gains from trade include:
   i. lower prices from competition
   ii. greater output from specialization
   iii. greater variety of goods and services available
       A) i and iii only
       B) ii and iii only
       C) i and ii only
       D) i, ii, and iii
       E) ii only
   Answer: D

59) If a nation has an absolute advantage in producing a good, then it
       A) will have a comparative advantage in producing that good.
       B) will have no need to trade with other nations.
       C) will always specialize in that good.
       D) might or might not have a comparative advantage in producing that good.
       E) will not have a comparative advantage in producing that good.
   Answer: D

60) In one hour John can produce 20 loaves of bread or 8 cakes. In one hour Phyllis can produce 30
    loaves of bread or 15 cakes. Which of the following statements is true?
       A) Phyllis has a comparative advantage in producing bread.
       B) John has a comparative advantage in producing cakes.
       C) Phyllis has an absolute advantage in both goods.
       D) John has an absolute advantage in both goods.
       E) Phyllis has a comparative advantage in producing both cakes and bread.
   Answer: C
61) "Comparative advantage" is defined as a situation in which one person can produce
A) more of all goods than another person.
B) more of a good than another person.
C) a good for a lower dollar cost than another person.
D) a good for a lower opportunity cost than another person.
E) all goods for lower opportunity costs than another person.
Answer: D

62) Scott and Cindy both produce only pizza and tacos. In one hour, Scott can produce 20 pizzas or 40 tacos. In one hour, Cindy can produce 30 pizzas or 40 tacos. Scott's opportunity cost of producing 1 taco is
A) 1/2 of a pizza.
B) 1 pizza.
C) 2 pizzas.
D) 20 pizzas.
E) 2 tacos.
Answer: A

63) Scott and Cindy both produce only pizza and tacos. In one hour, Scott can produce 20 pizzas or 40 tacos. In one hour, Cindy can produce 30 pizzas or 40 tacos. Cindy’s opportunity cost of producing 1 taco is
A) 3/4 of a pizza.
B) 1 pizza.
C) 30 pizzas.
D) 40 pizzas.
E) 1 1/3 tacos.
Answer: A
64) Scott and Cindy both produce only pizza and tacos. In one hour, Scott can produce 20 pizzas or 40 tacos. In one hour, Cindy can produce 30 pizzas or 40 tacos. Based on these data,
   A) Cindy has a comparative advantage at producing tacos.
   B) Scott has a comparative advantage at producing tacos.
   C) Cindy and Scott have the same comparative advantage in producing tacos.
   D) neither Cindy nor Scott has a comparative advantage in producing tacos.
   E) Cindy and Scott have the same comparative advantage in producing pizzas.

   Answer: B
   Topic: Comparative advantage
   Skill: Level 3: Using models
   Section: Checkpoint 3.4
   Status: Old
   AACSB: Analytical thinking

65) In one hour John can produce 20 loaves of bread or 16 cakes. In one hour Phyllis can produce 30 loaves of bread or 15 cakes. Which of the following statements is true?
   A) Phyllis has a comparative advantage in producing bread.
   B) John has a comparative advantage in producing cakes.
   C) Phyllis has an absolute advantage in both goods.
   D) John has an absolute advantage in both goods.
   E) Phyllis has a comparative advantage in producing both cakes and bread.

   Answer: B
   Topic: Comparative advantage
   Skill: Level 3: Using models
   Section: Checkpoint 3.4
   Status: Old
   AACSB: Analytical thinking

66) Comparative advantage is most closely related to which of the following concepts?
   A) productivity
   B) efficiency
   C) opportunity cost
   D) competition
   E) fairness

   Answer: C
   Topic: Comparative advantage
   Skill: Level 2: Using definitions
   Section: Checkpoint 3.4
   Status: New
   AACSB: Reflective thinking
67) If workers in Mexico produce fewer goods and services per hour than workers in the United States in all areas of production, then
   A) the United States will benefit from trade with Mexico, but Mexico will not.
   B) Mexico will benefit from trade with the United States, but the United States will not.
   C) neither Mexico nor the United States will benefit from trade with the other.
   D) both the United States and Mexico will benefit from trade with the other.
   E) it is unknown whether either country can benefit from trade with the other.

Answer: D

Topic: Achieving the gains from trade
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: New
AACSB: Reflective thinking
1) The figure above shows a production possibilities frontier. In the figure, which of the following combinations of the two goods cannot be produced with the current resources and technology?

A) 2 million cell phones and 13 million DVDs
B) 4 million cell phones and 4 million DVDs
C) 1 million cell phones and 14 million DVDs
D) 3 million cell phones and 5 million DVDs
E) 5 million cell phones and no DVDs

Answer: A

Topic: The economic problem
Skill: Level 3: Using models
Section: Checkpoint 3.1
Status: Old
AACSB: Analytical thinking
2) The figure above shows a production possibilities frontier. In the figure, which of the following combinations of the two goods are efficient?
   A) 2 million cell phones and 13 million DVDs
   B) 5 million cell phones and 15 million DVDs
   C) no cell phones and 15 million DVDs
   D) 4 million cell phones and 4 million DVDs
   E) None of these combinations is efficient.

Answer: C

3) The figure above shows a production possibilities frontier. In the figure, the economy faces a tradeoff when _______ cell phones and _______ DVDs. are produced.
   A) 3 million; 9 million
   B) 2 million; 9 million
   C) 3 million; 8 million
   D) 4.5 million; no
   E) 5 million; 15 million

Answer: A

4) The figure above shows a production possibilities frontier. In the figure, when the economy moves from point E to point D, what is the opportunity cost of a DVD?
   A) 0.25 cell phones
   B) 0.5 cell phones
   C) 1 cell phone
   D) 4 cell phones
   E) zero

Answer: A
5) The figure above shows a production possibilities frontier. In the figure, when the economy moves from point D to point C, the opportunity cost of producing one more DVD ________, and when it moves from point C to D, the opportunity cost of producing one more cell phone ________.

   A) increases; increases
   B) increases; decreases
   C) decreases; decreases
   D) decreases; increases
   E) increases; remains the same

Answer: A

Topic: The economic problem
Skill: Level 3: Using models
Section: Checkpoint 3.2
Status: Old
AACSB: Analytical thinking

6) The figure above shows a production possibilities frontier. In the figure, when the economy moves from point C to point B, what is the opportunity cost of a DVD?

   A) 0.5 cell phones
   B) 2 cell phones
   C) 0.5 million cell phones
   D) 2 million cell phones
   E) zero

Answer: A

Topic: The economic problem
Skill: Level 3: Using models
Section: Checkpoint 3.2
Status: Old
AACSB: Analytical thinking
7) The figure above shows how the PPF for cell phones and new cell-phone factories can expand. In the figure, if the economy produced 4 million cell phones using the resources efficiently, the PPF would
   A) expand, but not as far as shown in the figure.
   B) not expand.
   C) expand farther than shown in the figure.
   D) expand along the vertical axis and not along the horizontal axis.
   E) expand evenly along both axes.
Answer: A

8) The figure above shows how the PPF for cell phones and new cell-phone factories can expand. In the figure, if the economy chose the point on this year's PPF that is above point K, the next year's PPF would
   A) shift outward along the horizontal axis farther than the new PPF shown in the figure.
   B) shift outward along the horizontal axis, but not as far as the new PPF shown in the figure.
   C) shift outward along the vertical axis, not along the horizontal axis.
   D) shift inward along the horizontal axis.
   E) shift inward along the vertical axis.
Answer: A
9) The figure above shows how the PPF for cell phones and new cell-phone factories can expand. In the figure, if the economy chose the point on this year’s PPF that is below point K, the next year’s PPF would
   A) shift outward along the horizontal axis farther than the new PPF shown in the figure.
   B) shift outward along the horizontal axis, but not as far as the new PPF shown in the figure.
   C) shift outward along the vertical axis, not along the horizontal axis.
   D) shift inward along the horizontal axis.
   E) shift inward along the vertical axis.

Answer: B

Topic: The economic problem
Skill: Level 3: Using models
Section: Checkpoint 3.3
Status: Old
AACSB: Analytical thinking
10) Liz has a comparative advantage in ______ and an absolute advantage in ______.
A) smoothies only; both goods
B) smoothies only; smoothies only
C) both goods; both goods
D) salads only; both goods
E) salads only; salads only
Answer: A

11) Liz has a comparative advantage in ______ because ______.
A) smoothies; her opportunity cost of producing smoothies is lower than Joe's
B) salads; her opportunity cost of producing salads is lower than Joe's
C) smoothies; she can produce more smoothies per hour than Joe can
D) salads; she can produce more salads per hour than Joe can
E) both goods; she can produce more of both goods per hour than Joe can
Answer: A
12) Given the information in the figure above, Liz _______ benefit from trade with Joe because _______.
   A) can; each of them has a comparative advantage in one of the goods
   B) can; each of them has an absolute advantage in one of the goods
   C) cannot; she has an absolute advantage in both goods
   D) cannot; she has a comparative advantage in both goods
   E) can; Joe is more productive in producing one of the goods

Answer: A

Topic: The economic problem
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSB: Analytical thinking

13) Given the information in the figure above, Joe can benefit from trade as far as the price at which he buys Liz’s smoothies is
   A) below 5 salads per smoothie.
   B) not higher than 2 salads per smoothie.
   C) not lower than 2 salads per smoothie.
   D) not lower than 1 salad per smoothie.
   E) not higher than 4 salads per smoothie.

Answer: A

Topic: The economic problem
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSB: Analytical thinking

14) Using the figure above, suppose with no trade Liz and Joe each produce at point A on their respective PPFs. Then, Liz suggests that they specialize and trade. She would produce only smoothies and Joe would produce only salads. Then she would sell 10 smoothies to Joe at a price of 2.5 salads per smoothie. In this scenario,
   A) Liz gains 10 smoothies and 5 salads, and Joe gains 5 smoothies.
   B) Liz gains 5 smoothies, and Joe gains 10 smoothies.
   C) Liz gains 10 smoothies, and Joe loses 5 smoothies.
   D) Liz gains 5 smoothies and 5 salads, and Joe loses 5 salads.
   E) Neither of the individuals gains from trade.

Answer: A

Topic: The economic problem
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSB: Analytical thinking
15) Using the figure above, suppose with no trade Liz and Joe each produce at point A on their respective PPFs. Then, Joe suggests that they specialize and trade. He would produce only salads and Liz would produce only smoothies. Then, Joe says, he would buy 16 smoothies from Liz at a price of 1.5 salads per smoothie. Liz should
   A) accept Joe’s offer since she will gain 4 smoothies and 4 salads.
   B) accept Joe’s offer, as she will be as well off as with no trade.
   C) not accept Joe’s offer, as the price he offers is too low for her to gain from trade.
   D) not accept Joe’s offer since she would lose 2 smoothies and 2 salads.
   E) accept Joe’s offer since she will gain 4 salads.

Answer: A

Topic: The economic problem
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACS B: Analytical thinking

3.6 Integrative Questions

1) As technology advances,
   A) all opportunity costs decrease.
   B) the PPF shifts outward.
   C) a country moves toward the midpoint along its PPF and can produce more of both goods.
   D) all opportunity costs increase.
   E) the PPF shifts inward because unemployment occurs.

Answer: B

Topic: Integrative
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACS B: Analytical thinking

2) If a country is operating at a point of production efficiency,
   A) it enjoys a free lunch when increasing production.
   B) it produces on its production possibilities frontier.
   C) it must specialize in the production of a good.
   D) it operates on its trade line.
   E) it cannot be producing at its point of comparative advantage.

Answer: B

Topic: Integrative
Skill: Level 2: Using definitions
Section: Integrative
Status: Old
AACS B: Reflective thinking
3) Relative to Al, Joe has _______ if Joe can produce a good at a lower opportunity cost than Al.
   A) a comparative advantage
   B) more production efficiency
   C) a comparative benefit
   D) a marginal benefit
   E) a free lunch
Answer: A

4) Suppose that after specializing according to comparative advantage, a country is trading with another nation that also specializes according to its comparative advantage. Which of the following statements are true for the first country?
   i. It enjoys gains from trade.
   ii. It must have an absolute advantage in the production of the good it produces.
   iii. It is producing at a point beyond its PPF.
   A) i only
   B) i and ii
   C) i and iii
   D) ii and iii
   E) i, ii, and iii
Answer: A
5) The table above gives the production possibilities frontier for two countries, Anaconda and Bear. This table shows that
   A) when Anaconda and Bear specialize and trade, Anaconda should specialize in the production of shoes.
   B) when Anaconda and Bear specialize and trade, Anaconda should produce at its production point E.
   C) Anaconda has an absolute advantage in the production of corn and shoes.
   D) Bear can consume no more than 2 bushels of corn and 700 pairs of shoes.
   E) Bear is unable to gain from trade with Anaconda.

Answer: B

Topic: Integrative
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACSBS: Analytical thinking

6) The table above gives the production possibilities frontier for two countries, Anaconda and Bear. The table shows that
   A) Bear achieves production efficiency only at its production point A.
   B) Anaconda achieves production efficiency only at its production point A.
   C) Anaconda has a comparative advantage in the production of corn.
   D) Bear has an absolute advantage in the production of both goods.
   E) Both answers A and B are correct.

Answer: C

Topic: Integrative
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACSBS: Analytical thinking
7) The table above gives the production possibilities frontier for two countries, Anaconda and Bear. The opportunity cost of moving from production point B to production point C for Anaconda equals _______ and for Bear equals _______.
   A) 1 ton of corn; 1 ton of corn
   B) 650 pairs of shoes; 900 pairs of shoes
   C) 550 pairs of shoes; 700 pairs of shoes
   D) 100 pairs of shoes; 200 pairs of shoes
   E) 50 pairs of shoes; 100 pairs of shoes
   Answer: D
   Topic: Integrative
   Skill: Level 3: Using models
   Section: Integrative
   Status: Old
   AACS: Analytical thinking

8) The table above gives the production possibilities frontier for two countries, Anaconda and Bear. The opportunity cost of moving from _______ is greater for _______.
   A) point A to point B; Anaconda
   B) point B to point A; Bear
   C) point D to point E; Bear
   D) point E to point D; Bear
   E) any point to any other point; Bear
   Answer: C
   Topic: Integrative
   Skill: Level 3: Using models
   Section: Integrative
   Status: Old
   AACS: Analytical thinking

3.7 Essay: Production Possibilities

1) What does the vertical intercept of a production possibilities frontier represent?
   Answer: The vertical intercept is the maximum amount that can be produced if all available resources are dedicated to the production of the good or service measured on the vertical axis.
   Topic: Production possibilities frontier
   Skill: Level 2: Using definitions
   Section: Checkpoint 3.1
   Status: Old
   AACS: Reflective thinking
2) What economic concepts are represented in the production possibilities model?

Answer: There are a large number of economic concepts illustrated by the production possibilities frontier:

- Scarcity of resources: The production possibilities frontier is a frontier between attainable and unattainable combinations.
- Opportunity cost: The negative slope of the production possibilities frontier indicates that in order to get more of one good, you must produce less of the other (tradeoff).
- Increasing opportunity cost: The bowed out production possibilities frontier represents the changing opportunity costs when resources are specialized.
- Production efficiency: Points on the production possibilities frontier efficiently use all resources while points below the production possibilities frontier represent unemployed or misallocated resources and the possibility of a free lunch.

Topic: Production possibilities frontier
Skill: Level 5: Critical thinking
Section: Checkpoint 3.1
Status: Old
AACSBS: Written and oral communication

3) How can a combination of goods be unattainable?

Answer: A combination of goods can be unattainable if producing that combination requires more resources and technology than are available.

Topic: Unattainable points
Skill: Level 1: Definition
Section: Checkpoint 3.1
Status: Old
AACSBS: Reflective thinking

4) What does a production point beyond the production possibilities frontier represent?

Answer: A production point beyond the production possibilities frontier is an unattainable combination of products.

Topic: Unattainable points
Skill: Level 1: Definition
Section: Checkpoint 3.1
Status: Old
AACSBS: Reflective thinking

5) "If Mexico is currently operating at a point beyond its production possibilities frontier, then there are unemployed or misallocated resources in Mexico.” Is this statement true or false? Briefly explain your answer.

Answer: The statement is false. It is false on two counts. First, production points beyond the production possibilities frontier are unattainable, so it is not possible for Mexico to be producing at such a point. Second, it is points within the production possibilities frontier that have unemployed or misallocated resources.

Topic: Unattainable points
Skill: Level 1: Definition
Section: Checkpoint 3.1
Status: Old
AACSBS: Written and oral communication
6) “If Mexico is currently operating at a point inside its production possibilities frontier, then there are unemployed or misallocated resources in Mexico.” Is this statement true or false? Briefly explain your answer.

Answer: The statement is true. Points within the production possibilities frontier are attainable, so it is possible for Mexico to be producing at a point within its frontier. At points within the production possibilities frontier, there are unemployed or misallocated resources.

Topic: Attainable points, unemployment
Skill: Level 1: Definition
Section: Checkpoint 3.1
Status: Old
AACSB: Reflective thinking

7) Are all points inside the production possibilities frontier unattainable?

Answer: No, all points within the production possibilities frontier are attainable, though there are unemployed resources at these points.

Topic: Attainable points, unemployment
Skill: Level 1: Definition
Section: Checkpoint 3.1
Status: Old
AACSB: Reflective thinking

8) In the movie Cast Away, Tom Hanks plays a FedEx efficiency expert stranded on a deserted island. While on the island, he divides his time between catching fish, gathering coconuts, painting, and building a raft. Suppose that these were Mr. Hanks’ only activities. Did he face an opportunity cost from pursuing any of these activities? Why or why not?

Answer: Yes, Mr. Hanks faces an opportunity cost from all of these endeavors. If he decides to use his time catching fish, he couldn’t gather coconuts, paint, or build a raft. Whatever he would have been doing, not opting to catch fish is his opportunity cost of catching fish. Similarly, time spent on building his raft means less time painting, or fewer coconuts for breakfast, or fewer fish for dinner. Tradeoffs such as these are a feature of any economy that is operating on its production possibilities frontier and cannot be avoided.

Topic: Tradeoffs
Skill: Level 3: Using models
Section: Checkpoint 3.1
Status: Old
AACSB: Written and oral communication
9) What does it mean when a "free lunch" is available? Relate your answer to the production possibilities frontier.

Answer: A free lunch means that there is no tradeoff, that is, the production of one good or service can be increased without decreasing the production of another good or service and thereby giving up some of the other good. A free lunch occurs when the economy is producing at a point within the production possibilities frontier because at these points some resource is unemployed. By utilizing the unemployed resource, more goods or services can be produced without giving up any other goods or services.

Topic: Free lunches  
Skill: Level 1: Definition  
Section: Checkpoint 3.1  
Status: Old  
AACSBA: Written and oral communication

10) Describe the differences between tradeoffs and free lunches in terms of a PPF.

Answer: A tradeoff is a constraint or limit that forces giving up one thing in exchange for something else. When resources are fully employed, a country operates on its PPF. Any movement from one point to another point along the PPF requires the country to make a tradeoff between the two goods because one good is given up to get some other good. A free lunch occurs when some resources are not being used or not being used in their most productive way. When a country operates inside its PPF and moves toward its PPF choosing a different combination of goods, the country enjoys a free lunch. It does not face a tradeoff.

Topic: Tradeoffs and free lunches  
Skill: Level 1: Definition  
Section: Checkpoint 3.1  
Status: Old  
AACSBA: Written and oral communication

11) On a production possibilities frontier diagram, where are production points that have tradeoffs? Where are production points with a free lunch?

Answer: A tradeoff is a situation in which a limit forces one thing to be given up in exchange for something else. Any point on the production possibilities frontier itself is a production point with a tradeoff. Why? Moving along the production possibilities frontier means that more of one good can be obtained only at the (opportunity) cost of giving up some other good, which means that there is a tradeoff. A free lunch is the absence of a tradeoff, that is, when the production of a good or service can be increased without decreasing the production of another good or service. A free lunch occurs at any point within the production possibilities frontier. At these points, resources are being used inefficiently. By utilizing the resource efficiently, more goods or services can be produced without giving up any other goods or services.

Topic: Tradeoffs and free lunches  
Skill: Level 1: Definition  
Section: Checkpoint 3.1  
Status: Old  
AACSBA: Written and oral communication
12) Explain why a movement from a point inside a production possibilities frontier to the production possibilities frontier is described as a free lunch and a movement along a production possibilities frontier is described as a tradeoff.

Answer: The key point to answer this question is the fact that producing more of a good requires more resources. Hence, if all resources are employed efficiently, as is the case when producing on the production possibilities frontier, producing more of one good means reallocating resources away from the production of another good; there is a tradeoff between the two goods. In other words, to produce more of one good, the production of another must be given up. If, however, resources are used inefficiently, as is the case when producing inside the production possibilities frontier, then the production of a good can be increased by using the resources efficiently; hence no tradeoff is required and the additional goods are a free lunch.

Topic: Tradeoffs and free lunches
Skill: Level 4: Applying models
Section: Checkpoint 3.1
Status: Old
AACS: Written and oral communication

13) Draw a production possibilities frontier between beans and peas. Label the unattainable points, the attainable points with fully employed resources, and the attainable points with unemployed resources.

Answer:

The production possibilities frontier, with the points labeled, is above. Any point beyond the production possibilities frontier is unattainable. Any point on the production possibilities frontier is attainable and resources are fully employed. Finally, any point within the production possibilities frontier is attainable and has unemployed resources.

Topic: Production possibilities frontier
Skill: Level 1: Definition
Section: Checkpoint 3.1
Status: Old
AACS: Analytical thinking
14) The figure above shows a nation's production possibilities frontier for apples and oranges.

a. What combination of goods is represented by point A?
b. What combination of goods is represented by point B?
c. Which point represents an unattainable combination of goods?
d. The movement from point C to point D results in a free lunch. What is the free lunch?

Answer: 

a. 3 million bushels of apples and 3 million bushels of oranges
b. 3 million bushels of apples and 4 million bushels of oranges
c. Point B is an unattainable point.
d. The movement from point C to point D results in an increase of 1 million bushels of oranges with no decrease in apples. Therefore the 1 million bushels of oranges are a free lunch.

*Topic: Production possibilities frontier*
*Skill: Level 1: Definition*
*Section: Checkpoint 3.1*
*Status: Old*
*AACSB: Analytical thinking*
15) Before the first Gulf War, Kuwait had the capacity to produce a certain amount of oil from its oil wells. After the war, it found that capacity greatly diminished because the oil wells were on fire. Draw Kuwait’s PPF before and after the war, assuming that the only two goods produced are oil and food. Further assume that setting the oil wells on fire did not affect Kuwait’s ability to produce food. Explain why the PPF before the war is different from the PPF after the war.

Answer:

When a PPF is drawn, we draw it for a fixed amount of natural resources, along with fixed amounts of the other factors of production such as labor, capital, etc. Fire reduced Kuwait’s natural resources temporarily, so the PPF after the war shifted inwards. However, because setting the oil wells on fire did not affect Kuwait’s ability to produce food, the maximum amount of food production, the point where the PPF intersects the vertical axis, did not change.

3.8 Essay: Opportunity Cost

1) Moving on a bowed out PPF, what happens to the opportunity cost of its production as a nation specializes more in one product?

Answer: The bowed out PPF indicates that as the amount of the good produced increases, the good’s opportunity cost increases.
2) Why is the production possibilities frontier bowed out?
   Answer: The production possibilities frontier is bowed out because resources are not equally productive in all uses. The resources used to produce robots are different from the resources used to produce pizzas. Thus, as more of one good is produced, say robots, less productive resources must be used to increase the number of robots produced. Hence the opportunity cost of the additional robots increases, which gives the production possibilities frontier a bowed out shape.

   Topic: Increasing opportunity costs
   Skill: Level 2: Using definitions
   Section: Checkpoint 3.2
   Status: Old
   AACSBB: Written and oral communication

3) Why does the production possibilities frontier have a bowed out shape rather than being a straight line?
   Answer: The fact that as the production of one good or service increases, its opportunity cost increases means that the production possibilities frontier will be bowed out. Only if the opportunity cost remained constant as the production of a good increases would the production possibilities frontier be a straight line.

   Topic: Increasing opportunity costs
   Skill: Level 4: Applying models
   Section: Checkpoint 3.2
   Status: Old
   AACSBB: Written and oral communication

4) When economists state that the opportunity cost of a product increases as more of it is produced, what do they mean? For instance, what is the opportunity cost? And, where in a PPF diagram does this statement apply and where does it not apply?
   Answer: In general, the opportunity cost of increasing the production of one good or service is the forgone production of another good or service. The statement that the opportunity cost of a product increases as more of it is produced applies to production points on the production possibilities frontier. On the production possibilities frontier, resources are fully employed. Hence to increase the production of one good or service, resources must be switched away from the production of another good or service and hence the production of that good or service decreases. And, as more of the first good or service is produced, the opportunity cost of an additional unit becomes larger, so that the opportunity cost increases. However, the assertion that the opportunity cost of a product increases as more of it is produced does not apply to production points within the production possibilities frontier. Production points within the production possibilities frontier are points at which there are resources being used inefficiently. From a production point with inefficiently used resources, to increase the production of a good, some of the resources can be used efficiently and so there is no opportunity cost in terms of forgone other products. Therefore from a point within the production possibilities frontier, the opportunity cost of increasing the production of a good is zero.

   Topic: Increasing opportunity costs
   Skill: Level 2: Using definitions
   Section: Checkpoint 3.2
   Status: Old
   AACSBB: Written and oral communication
5) What is the relationship between the bowed out shape of the production possibilities frontier and the increasing opportunity cost of a good as more of it is produced?

Answer: The production possibilities frontier is bowed out because the opportunity cost of a good increases as more of it is produced. As the first unit of the good measured along the horizontal axis is produced, resources that are extremely well suited for its production can be used. Because of the suitability, not many resources need to be devoted to its production, so the opportunity cost—the decrease in the production of the good measured along the vertical axis—is not large. Hence at this location along the production possibilities frontier, the slope of the production possibilities frontier is shallow. But, as more of the product is produced, resources that are not as well suited must be devoted to its production. Consider one of the last units of this good, just before the production possibilities frontier intersects the horizontal axis. By the time the nation produces this much of the product, to produce one more unit means that resources that are extremely poorly suited in its manufacture must be used. Because these resources are not well suited, a lot of them must be used and, because a lot of them must be used, the opportunity cost in terms of the forgone other good is large. With the large decrease in the production of the good along the vertical axis, the slope of the production possibilities frontier at this location is steep. So, the production possibilities frontier goes from having a shallow slope to a steep one, that is, the production possibilities frontier is bowed outward.

Topic: Increasing opportunity costs
Skill: Level 2: Using definitions
Section: Checkpoint 3.2
Status: Old
AACSB: Written and oral communication
6) A (very, very small) country produces milk and shirts and its production possibilities frontier is in the table above.

<table>
<thead>
<tr>
<th>Production point</th>
<th>Milk (gallons)</th>
<th>Shirts (numbers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>90</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>70</td>
</tr>
<tr>
<td>D</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td>E</td>
<td>8</td>
<td>0</td>
</tr>
</tbody>
</table>

a. The nation is currently producing at point B. What is the opportunity cost of two additional gallons of milk? At point C? At point D? What do your results show?

Answer: a. At point B, the opportunity cost of 2 additional gallons of milk is 20 shirts. At point C, the opportunity cost of 2 additional gallons of milk is 30 shirts. At point D, the opportunity cost of 2 additional gallons of milk is 40 shirts. The opportunity cost of 2 additional gallons of milk increases as more milk is produced.

b. Suppose the nation is initially producing 4 gallons of milk and 40 shirts. What is the opportunity cost of 2 additional gallons of milk? Explain your answer.

Answer: b. Producing 4 gallons of milk and 40 shirts means that the nation is producing at a point within the interior of its production possibilities frontier. Hence the opportunity cost of producing an additional 2 gallons of milk is 0. The opportunity cost is 0 because at a production point in the interior of the production possibilities frontier there are unemployed resources. These unemployed resources can be put to work producing the additional 2 gallons of milk. Because they were not producing anything previously, there is no decrease in the production of shirts and hence no opportunity cost.

Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 3.2
Status: Old
AACSB: Analytical thinking
7) Jean can either type her term paper or create Web pages during the limited time she has available. The table above shows her \textit{PPF}.

a. Can Jean type 90 pages and create 2 Web pages?
b. Use the above numbers to calculate the opportunity cost of a typed page as she increases her time typing and decreases time creating a Web page.

Answer: a. Jean cannot type 90 pages and create 2 Web pages because, as row \textit{D} shows, that combination is beyond her \textit{PPF}.
b. The opportunity cost is the ratio of the decrease in the number of Web pages divided by the increase in the number of typed pages. The following table gives the opportunity cost for typed pages.

<table>
<thead>
<tr>
<th>Movement from</th>
<th>Increase in typed pages</th>
<th>Decrease in Web pages</th>
<th>Opportunity cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>A to B</td>
<td>40</td>
<td>1</td>
<td>1/40</td>
</tr>
<tr>
<td>B to C</td>
<td>30</td>
<td>1</td>
<td>1/30</td>
</tr>
<tr>
<td>C to D</td>
<td>20</td>
<td>1</td>
<td>1/20</td>
</tr>
<tr>
<td>D to E</td>
<td>10</td>
<td>1</td>
<td>1/10</td>
</tr>
</tbody>
</table>

\textit{Topic: Opportunity cost}
\textit{Skill: Level 3: Using models}
\textit{Section: Checkpoint 3.2}
\textit{Status: Old}
\textit{AACSB: Analytical thinking}
8) The table above gives the production possibilities frontier for a nation that produces wheat and soybeans. Use the information in that table to complete the table below, which has in it the opportunity costs of moving from one production point to another. Do not forget to note the units of the opportunity costs.

<table>
<thead>
<tr>
<th>Production point</th>
<th>Wheat (bushels)</th>
<th>Soybeans (bushels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1,500</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>1,000</td>
<td>2,250</td>
</tr>
<tr>
<td>C</td>
<td>500</td>
<td>3,500</td>
</tr>
<tr>
<td>D</td>
<td>0</td>
<td>4,000</td>
</tr>
</tbody>
</table>

The table above gives the opportunity costs. The units of the opportunity costs are in the column headings.

---

**Answer:**

<table>
<thead>
<tr>
<th>Movement from</th>
<th>Opportunity cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>A to B</td>
<td>0.22 (bushels of soybeans per bushel of wheat)</td>
</tr>
<tr>
<td>B to C</td>
<td>0.40 (bushels of soybeans per bushel of wheat)</td>
</tr>
<tr>
<td>C to D</td>
<td>1.00 (bushels of soybeans per bushel of wheat)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Movement from</th>
<th>Opportunity cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>D to C</td>
<td>1.00 (bushels of wheat per bushel of soybeans)</td>
</tr>
<tr>
<td>C to B</td>
<td>2.50 (bushels of wheat per bushel of soybeans)</td>
</tr>
<tr>
<td>B to A</td>
<td>4.50 (bushels of wheat per bushel of soybeans)</td>
</tr>
</tbody>
</table>

---

*Topic: Opportunity cost*  
*Skill: Level 3: Using models*  
*Section: Checkpoint 3.2*  
*Status: Old*  
*AACSB: Analytical thinking*
9) The figure above represents the production possibilities frontier for a country.
   a. The nation is currently producing at point B and wants to move to point C. What is the opportunity cost of the move?
   b. The nation is currently producing at point B and wants to move to point A. What is the opportunity cost of the move?
   c. The nation is currently producing at point D and wants to move to point B. What is the opportunity cost of the move?

Answer: a. By moving from point B to point C, the production of automobiles decreases by 1 million, from 3 million to 2 million. The 1 million decrease in automobiles is the opportunity cost of the movement.
   b. By moving from point B to point A, the production of cameras decreases by 3 million, from 3 million to 0 million. The 3 million decrease in cameras is the opportunity cost of the movement.
   c. By moving from point D to point B the nation gains 1 million additional cameras and also gains 2 million additional automobiles. The opportunity cost of this movement is zero, because there are no goods forgone. No goods are forgone because the nation is moving from a point with inefficiently used resources, point D, to one at which resources are efficiently utilized, point B.

Topic: Opportunity cost
Skill: Level 3: Using models
Section: Checkpoint 3.2
Status: Old
AACSB: Analytical thinking
<table>
<thead>
<tr>
<th>Production point</th>
<th>Beef (pounds)</th>
<th>Wheat (bushels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>D</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

10) The table above presents the production possibilities of Farmer Brown. Use these data to calculate Farmer Brown’s opportunity cost of additional beef as Farmer Brown moves from point A to B to C to D. Also use the data to calculate Farmer Brown’s opportunity cost of additional wheat as Farmer Brown moves from point D to C to B to A. Based on these costs, does Farmer Brown use resources that are more productive in one activity than the other or are they equally productive in both uses? Explain your answer.

Answer: The opportunity cost of a pound of beef is 1 bushel of wheat between points A and B, 1 1/2 bushels of wheat between points B and C, and 2 bushels of wheat between points C and D. The opportunity cost of a bushel of wheat is 1/2 pound of beef between points D and C, 2/3 pound of beef between points C and B, and 1 pound of beef between points B and A. Farmer Brown does use resources that are more productive in one activity than the other because the opportunity costs of producing beef and wheat increase as more beef and wheat are produced. If the resources were equally productive in both activities, the opportunity costs would be constant.

**Topic:** Increasing opportunity costs  
**Skill:** Level 3: Using models  
**Section:** Checkpoint 3.2  
**Status:** Old  
**AACSBS:** Analytical thinking

### 3.9 Essay: Economic Growth

1) How is economic growth shown in a production possibilities frontier graph?

Answer: Economic growth is illustrated as an outward shift of the PPF.

**Topic:** Economic growth  
**Skill:** Level 2: Using definitions  
**Section:** Checkpoint 3.3  
**Status:** Old  
**AACSBS:** Reflective thinking

### 3.10 Essay: Specialization and Trade

1) What is comparative advantage? Give an example.

Answer: Comparative advantage is the ability of a person to produce a good at a lower opportunity cost compared to another person. A lower opportunity cost means that the person gives up less to produce the good compared to another person. For example, one person may need to give up one hour of typing to get dinner made while another person must give up two hours of typing to produce the same dinner.

**Topic:** Comparative advantage  
**Skill:** Level 1: Definition  
**Section:** Checkpoint 3.4  
**Status:** Old  
**AACSBS:** Written and oral communication
2) "When a person has an absolute advantage in producing a good, the person necessarily has a lower opportunity cost of producing it." Is this assertion true or false?

Answer: The assertion is incorrect. An absolute advantage is when a person can produce more of the good than someone else. A comparative advantage relies on a comparison of opportunity costs, so a person has a comparative advantage in producing a good if the person can produce the good at a lower opportunity cost.

Topic: Comparative advantage versus absolute advantage
Skill: Level 2: Using definitions
Section: Checkpoint 3.4
Status: Old
AACSB: Written and oral communication

3) "When a person is more productive in producing a good or service than another person, the first person has the comparative advantage in producing the good." Is this assertion correct or incorrect? Explain your answer.

Answer: The assertion is incorrect. The statement describes an absolute advantage, that is, a person has an absolute advantage in the production of a good if the person can produce more of it in a given time period than someone else. Comparative advantage, however, relies on a comparison of opportunity costs. A person has a comparative advantage in producing a good if the person can produce the good at a lower opportunity cost than another person.

Topic: Comparative advantage versus absolute advantage
Skill: Level 2: Using definitions
Section: Checkpoint 3.4
Status: Old
AACSB: Written and oral communication

4) Why is it likely that the United States has an absolute advantage in goods and yet it still ends up importing them from other countries?

Answer: The United States might have an absolute advantage in producing a good but not a comparative advantage. In this case, the opportunity cost of producing the good in the United States is higher than in another country. Thus the United States will import the product from the other country.

Topic: Comparative advantage versus absolute advantage
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSB: Written and oral communication
5) The United States has an absolute advantage in producing sugar over all of the other sugar producing countries. Does this fact mean that we should not import any sugar from the other countries?

Answer: Having an absolute advantage doesn’t mean that the United States should engage in the production of sugar. If the opportunity cost of sugar in the United States is higher than in the other countries, then the other countries will have the comparative advantage. The countries with the comparative advantage are the ones that should do the producing. Quite likely these other nations have the comparative advantage and so it would be good policy for the United States to import sugar from these nations.

Topic: Comparative advantage versus absolute advantage
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSBB: Written and oral communication

6) Japan can use all of its resources to produce 100 videos or 400 shoes. China can use all of its resources to produce 25 videos or 200 shoes. Which nation has the comparative advantage in shoes and which nation has the comparative advantage in videos?

Answer: In Japan, the opportunity cost of producing a video is 4 shoes and in China it is 8 shoes. Therefore Japan has the comparative advantage in producing videos because its opportunity cost is lower. In Japan, the opportunity cost of producing a shoe is 1/4 of a video and in China the opportunity cost of producing a shoe is 1/8 of a video. China has the comparative advantage in producing shoes because its opportunity cost is lower.

Topic: Comparative advantage
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSBB: Analytical thinking

7) The United States can use all of its resources to produce 50 computers or 4,000 shoes. Suppose that at world market prices, one computer exchanges for 100 shoes. Explain how the United States can gain from trade.

Answer: In the United States, the opportunity cost to produce 1 computer is 80 pairs of shoes. The United States can then sell the computers on the world market for 100 shoes each and thereby be ahead by 20 shoes per computer.

Topic: Comparative advantage
Skill: Level 4: Applying models
Section: Checkpoint 3.4
Status: Old
AACSBB: Analytical thinking
8) The table above shows the amounts of cloth and cheese that China and Pakistan can produce in an hour. Which country has the comparative advantage in cloth and which country has the comparative advantage in cheese?

Answer: In China, to produce 8 cloths has an opportunity cost of 16 cheeses, so the opportunity cost of 1 cloth is (16 cheese)/(8 cloths) = 2 cheeses per cloth. In Pakistan, to produce 4 cloths has an opportunity cost of 12 cheeses. Hence the opportunity cost of 1 cloth is (12 cheeses)/(4 cloths) or 3 cheeses per cloth. Because China’s opportunity cost of a cloth is lower, China has the comparative advantage in producing cloth.

In China, to produce 16 cheeses has an opportunity cost of 8 cloths, so the opportunity cost of 1 cheese is (8 cloths)/(16 cheeses) = 1/2 cloth per cheese. In Pakistan, to produce 12 cheeses has an opportunity cost of 4 cloths. Hence the opportunity cost of 1 cheese is (4 cloths)/(12 cheeses) or 1/3 cloth per cheese. Because Pakistan’s opportunity cost of a cheese is lower, Pakistan has the comparative advantage in producing cheese.

<table>
<thead>
<tr>
<th>China’s production in 1 hour</th>
<th>Pakistan’s production in 1 hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloth 8</td>
<td>Cloth 4</td>
</tr>
<tr>
<td>Cheese 16</td>
<td>Cheese 12</td>
</tr>
</tbody>
</table>

9) Omar and John can fix computers or write computer programs. The table above shows the number of computers they can fix and the lines of code they can write in a day.

a. Who, if anyone, has the absolute advantage?

b. Who has the comparative advantage in fixing computers? Why?

c. Who has the comparative advantage in writing programs? Why?

Answer: a. Omar has an absolute advantage in fixing computers and writing code because he can fix 12 per day compared to John who can fix only 4 per day, and can write 800 lines of code per day compared to John who can write only 200 lines a day.

b. John has the comparative advantage in fixing computers. He has the comparative advantage because his opportunity cost of fixing one computer is 50 lines of computer code. Omar does not have a comparative advantage in fixing computers because his opportunity cost of fixing a computer is higher at 66.7 lines of code.

c. Omar has the comparative advantage in writing programs. His opportunity cost of writing one line of code is .015 of a computer fixed. John does not have the comparative advantage in writing programs because his opportunity cost of writing one line of code is 0.02 computers fixed. (Alternatively, to write 1 line of code costs Omar the opportunity to repair 1.5 percent of a computer and costs John the opportunity to repair 2.0 percent of a computer.)
10) Two nations can produce computers and software in the amounts given in the table above. Does either nation have an absolute advantage in producing the products? Which nation has a comparative advantage in computers? Which nation has a comparative advantage in software? Explain your answers.

Answer: Nation B has an absolute advantage in producing both goods because it can produce more of both in one day than can Nation A. Nation B has the comparative advantage in computer production and Nation A has the comparative advantage in software. The nation with the lowest opportunity cost of producing a good has the comparative advantage in that good. In Nation A, to produce 100 computers has the opportunity cost of 140 units of software forgone, so the opportunity cost of 1 computer equals (140 units of software)/(100 computers) = 1.4 units of software per computer. In Nation B, similar calculations show that the opportunity cost for a computer is 1.25 units of software per computer. Nation B’s opportunity cost is lower, so Nation B has the comparative advantage in computers. For software, in Nation A the opportunity cost of a unit of software is (100 computers)/(140 units of software) = 0.71 computers per unit of software while in Nation B the opportunity cost is (120 computers)/(150 units of software) = 0.80 computers per unit of software. Nation A’s opportunity cost is lower, so Nation A has the comparative advantage in software.

<table>
<thead>
<tr>
<th>Nation A’s production in 1 day</th>
<th>Nation B’s production in 1 day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers</td>
<td>100</td>
</tr>
<tr>
<td>Software</td>
<td>140</td>
</tr>
</tbody>
</table>

Topic: Comparative advantage
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSB: Analytical thinking
11) The figure above shows Prakash’s and Gail’s production possibilities frontiers for writing books and magazine articles.

a. What is Prakash’s opportunity cost of a book? What is Gail’s opportunity cost? Who has the comparative advantage in writing books?

b. Who has the comparative advantage in writing magazine articles?

c. According to their comparative advantages, who should write books and who should write magazine articles?

Answer: a. In a year, Prakash can write 2 books or 40 magazine articles. Hence the opportunity cost of 1 book is (40 magazine articles) ÷ (2 books) = 20 magazine articles per book. In a year, Gail can write 3 books or 30 magazine articles. Hence the opportunity cost of 1 book is (30 magazine articles) ÷ (3 books) = 10 magazine articles per book. Gail’s opportunity cost of writing books is lower than Prakash’s, so Gail has the comparative advantage in writing books.

b. Prakash has the comparative advantage in writing magazine articles.

c. Gail has the comparative advantage in writing books, so she should write books. Prakash has the comparative advantage in writing magazine articles, so he should write magazine articles.

Topic: Comparative advantage
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSB: Analytical thinking
12) "When countries specialize in producing the good in which they have a comparative advantage and then trade with each other, only the country with the absolute advantage gains." Is the previous statement correct or incorrect? Briefly explain your answer.

Answer: The statement is incorrect. Absolute advantage, which is essentially the ability to produce more of a good than another country, has nothing to do with the gains from trade. All nations gain from free international trade regardless of whether they possess an absolute advantage or not.

Topic: Gains from trade
Skill: Level 2: Using definitions
Section: Checkpoint 3.4
Status: Old
AACSBS: Written and oral communication

13) "Because the United States is the largest economy in the world and can produce anything it needs domestically, there are no gains from trade for the United States." Is the previous statement correct or incorrect?

Answer: The statement is incorrect. The United States, like any other nation, gains from trade when it specializes according to comparative advantage.

Topic: Gains from trade
Skill: Level 2: Using definitions
Section: Checkpoint 3.4
Status: Old
AACSBS: Reflective thinking

14) How can a nation that is at an absolute disadvantage gain from trade?

Answer: Being at an absolute disadvantage means that the nation can produce less than its trading partner, but it says nothing about the relative costs of producing the goods. International trade is based on comparative advantage, which means that the low-cost producer specializes in the production of a good and exports it to the other nation that has the higher cost of production. A nation that has an absolute disadvantage still has a lower opportunity cost of production for one of the goods and hence has the comparative advantage in the production of that good. Therefore this country will gain from trade, as will all its trading partners.

Topic: Gains from trade
Skill: Level 4: Applying models
Section: Checkpoint 3.4
Status: Old
AACSBS: Written and oral communication

15) Why do nations engage in international trade?

Answer: Nations engage in international trade because they gain from trade. International trade results in a more efficient use of resources and thereby increases world output. As a result, it increases the amount of goods and services available for consumption in all nations and thereby makes all countries better off.

Topic: Gains from trade
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSBS: Written and oral communication
16) Explain why specialization and trade increases a country's overall level of consumption.

Answer: A country specializes in the activities in which it has the lowest opportunity cost. By trading, it can obtain goods and services at a lower opportunity cost than it would cost to produce the goods and services domestically. Hence the nation acquires goods and services at a lower cost than before and so the nation’s consumption increases. In fact, trade allows the nation to consume at a point beyond its production possibilities frontier.

Topic: Gains from trade
Skill: Level 3: Using models
Section: Checkpoint 3.4
Status: Old
AACSB: Analytical thinking
4.1 Demand

1) A market is defined as
   A) a physical place where people buy only goods.
   B) a physical place where people buy both goods and services.
   C) a store where people buy physical goods.
   D) any arrangement that brings buyers and sellers together.
   E) a place where one good is bartered for another.

   Answer: D

   Topic: Markets
   Skill: Level 1: Definition
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Reflective thinking

2) EBay
   A) will be considered a market when the Internet firms are profitable.
   B) is a market because buyers and sellers are brought together to buy and sell.
   C) would be a market if there was only one physical location.
   D) cannot function as a market.
   E) is not a market because buyers can buy from only one seller at any point in time.

   Answer: B

   Topic: Markets
   Skill: Level 1: Definition
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Reflective thinking

3) Which of the following statements is true about a competitive market? A competitive market
   A) must have a physical location.
   B) includes markets for goods and services but not for inputs.
   C) has so many buyers and sellers that no one can influence the price.
   D) has one seller competing to sell his or her product.
   E) has a handful of sellers but always has many buyers.

   Answer: C

   Topic: Markets
   Skill: Level 1: Definition
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Reflective thinking
4) If Mark tries to purchase a new refrigerator in a perfectly competitive market, then
   A) he will find himself constantly haggling with sellers over the price.
   B) he will have only a few sellers available to him.
   C) he will have a very limited ability to negotiate over the price.
   D) he will see large differences in the types of refrigerators sold across sellers.
   E) None of the above is correct.

   Answer: C

   Topic: Markets
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: New
   AACSB: Reflective thinking

5) In a perfectly competitive market, an individual _______ has _______ influence over the
   market price of the good or service being sold.
   A) buyer; basically no
   B) seller; basically no
   C) buyer; a great deal of
   D) seller; a great deal of
   E) Both A and B are correct.

   Answer: E

   Topic: Markets
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: New
   AACSB: Reflective thinking

6) Assume that the market for consumer gasoline is perfectly competitive. When one additional
   seller (gas station) enters the market,
   A) the price of gasoline increases.
   B) the price of gasoline decreases.
   C) the price of gasoline is left unaffected.
   D) then at least one other seller must exit the market.
   E) None of the above is correct.

   Answer: C

   Topic: Markets
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: New
   AACSB: Reflective thinking
7) What is the "quantity demanded"?
   A) the amount of a good people desire
   B) the amount of a good people are able and willing to buy during a specific time period and at a given price
   C) the amount of a good people are able and willing to buy at all possible prices
   D) the maximum amount of a good that can be consumed during a specific time period
   E) the minimum amount of a good that people are willing to buy during a specific time period and at a given price

   Answer: B
   Topic: Quantity demanded
   Skill: Level 1: Definition
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Reflective thinking

8) The "quantity demanded" of any good or service is ______ during a specified time period and at a specified price.
   A) the amount people are willing to buy
   B) the amount people are able to buy
   C) the amount people are willing and able to offer
   D) the amount people are willing and able to buy
   E) the amount people are willing to buy because it is the amount sellers are willing to sell

   Answer: D
   Topic: Quantity demanded
   Skill: Level 1: Definition
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Reflective thinking

9) The "law of demand" refers to the fact that, other things remaining the same, when the price of a good rises,
   A) the demand curve shifts rightward.
   B) the demand curve shifts leftward.
   C) there is a movement down along the demand curve to a larger quantity demanded.
   D) there is a movement up along the demand curve to a smaller quantity demanded.
   E) the demand curve shifts rightward and there is a movement up along the demand curve to a smaller quantity demanded.

   Answer: D
   Topic: Law of demand
   Skill: Level 1: Definition
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Reflective thinking
10) The law of demand refers to how
A) demand changes when people’s incomes change.
B) demand changes when the prices of substitutes and complements change.
C) the quantity demanded changes when the price of the good changes.
D) the price of the good changes when people’s demand for the good changes.
E) the quantity demanded changes when the demand for the good changes.
Answer: C

11) Which of the following describes the law of demand? When other things remain the same, as
A) the price of gas falls, the quantity demanded of gas increases.
B) the quantity demanded of bread increases, the price of bread falls.
C) the price of peanut butter increases, the quantity demanded of jelly decreases.
D) your income increases, you’ll buy more hamburgers.
E) more people decide to eat pizza, the demand for pizza increases.
Answer: A

12) Gasoline prices increase by 50 percent and other things remain the same. As a result, there is
A) an increase in the demand for gasoline.
B) a decrease in the demand for gasoline.
C) no change in the quantity of gasoline demanded.
D) a decrease in the quantity of gasoline demanded.
E) More information is needed to determine if the demand for gasoline increases or decreases.
Answer: D
13) The law of demand asserts that all else equal, if the price of a good ________, the quantity demanded of that good ________.

A) falls; decreases
B) falls; increases
C) rises; stays the same
D) stays the same; decreases
E) None of the above is correct.

Answer: B

14) In stores, it is common to find seasonal products marked down when the season ends. What explains this behavior?

A) The law of demand is being used to increase the quantity demanded.
B) The store is trying to increase its customers' demand for the product.
C) The store manager must be trying to drive away customers by selling low quality products.
D) The store is trying to increase its consumers' incomes by increasing their purchasing power.
E) The store is trying to sell the goods and realizes that they are substitutes for other goods whose prices have risen.

Answer: A

15) The law of demand implies that, other things remaining the same,

A) as the price of a cheeseburger rises, the quantity of cheeseburgers demanded increases.
B) as the price of a cheeseburger rises, the quantity of cheeseburgers demanded decreases.
C) as income increases, the quantity of cheeseburgers demanded increases.
D) as the demand for cheeseburgers increases, the price of a cheeseburger falls.
E) as more people demand cheeseburgers, the quantity demanded increases.

Answer: B
16) An increase in the quantity demanded is shown as
   A) a movement along the demand curve.
   B) a movement toward the demand curve.
   C) a rightward shift of the demand curve.
   D) a leftward shift of the demand curve.
   E) both a movement along the demand curve and a shift of the demand curve.

   Answer: A

   Topic: Quantity demanded
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACS: Reflective thinking

17) Which of the following results in a movement upward along the demand curve for movies?
   A) an increase in the price of movie tickets
   B) a decrease in the price of movie tickets
   C) an increase in income, assuming that movies are a normal good
   D) a decrease in income, assuming that movies are a normal good
   E) a decrease in the price of Netflix, a substitute for movies

   Answer: A

   Topic: Quantity demanded
   Skill: Level 3: Using models
   Section: Checkpoint 4.1
   Status: Old
   AACS: Analytical thinking

18) Which of the following is true regarding demand?
   i. Demand is the relationship between quantity demanded and the price of a good when all
      other influences on buying plans remain the same.
   ii. Demand refers to one quantity at one time.
   iii. "Demand" and "quantity demanded" are the same thing.

   A) i only
   B) ii only
   C) both i and ii
   D) iii only
   E) both ii and iii

   Answer: A

   Topic: Quantity demanded versus demand
   Skill: Level 1: Definition
   Section: Checkpoint 4.1
   Status: Old
   AACS: Reflective thinking
19) The price of cotton clothing falls. As a result,
   A) the quantity demanded of cotton clothing increases.
   B) the demand for cotton clothing increases.
   C) the quantity demanded of cotton clothing decreases.
   D) the demand for cotton clothing decreases.
   E) both the demand for cotton clothing increases and the quantity demand of cotton clothing increases.

   Answer: A

20) The American Dairy Association starts a highly successful advertising campaign that makes most people want to drink more milk. As a result,
   A) the demand for milk increases.
   B) the quantity demanded of milk increases.
   C) the price of milk falls to encourage people to drink more milk.
   D) the demand for milk is not affected.
   E) the demand for milk decreases because the price of milk rises.

   Answer: A

21) A demand schedule shows
   A) the quantities that people plan to buy in all possible circumstances.
   B) the quantities that people plan to buy at each different price when all other influences on buying plans remain the same.
   C) the quantities that people would plan to buy if they could afford them at each different price when all other influences on buying plans remain the same.
   D) the quantities that people plan to buy at each different income when all other influences on buying plans remain the same.
   E) the quantities that people plan to buy at each different price as long as producers are willing to supply that quantity.

   Answer: B
22) A demand schedule
   A) shows the quantity demanded at one price.
   B) is a graph showing a relationship between the quantity demanded and the price of a good.
   C) is a list of the quantities demanded at each different price when all other influences on buying plans remain the same.
   D) shows that demand is on schedule.
   E) shows how the demand changes when the supply changes.

   Answer: C
   
   Topic: Demand schedule
   Skill: Level 1: Definition
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Reflective thinking

23) The downward slope of a demand curve
   A) represents the law of demand.
   B) shows that as the price of a good rises, consumers increase the quantity they demand.
   C) indicates how the quantity demanded changes when incomes rise and the good is a normal good.
   D) indicates how demand changes when incomes rise and the good is a normal good.
   E) indicates how demand changes when the price changes and the good is a normal good.

   Answer: A
   
   Topic: Demand curve
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Reflective thinking

24) A demand curve
   A) has an upward slope.
   B) has a downward slope.
   C) is a graph of the relationship between quantity demanded of a good and its price.
   D) Both answers B and C are correct.
   E) Both answers A and C are correct.

   Answer: D
   
   Topic: Demand curve
   Skill: Level 1: Definition
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Reflective thinking
25) Demand curves slope _______ because as the price increases and other things remain the same, the quantity demanded _______.
   A) downward; decreases
   B) downward; increases
   C) upward; decreases
   D) upward; increases
   E) downward; does not change
Answer: A

Topic: Demand curve
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACSB: Reflective thinking

26) The market demand curve
   A) cannot show how quantity demanded changes in response to a change in price.
   B) cannot show a change in demand for a good.
   C) is the horizontal sum of individual demand curves.
   D) is the vertical sum of individual demand curves.
   E) is upward sloping.
Answer: C

Topic: Individual and market demand
Skill: Level 1: Definition
Section: Checkpoint 4.1
Status: Old
AACSB: Analytical thinking

27) The market demand curve for mangos is
   A) the same as the demand curve of one buyer in a market with many buyers.
   B) upward sloping because rich people can afford more mangos than poor people can buy.
   C) the horizontal sum of the individual demand curves of all the buyers.
   D) the vertical sum of the individual demand curves of all the buyers.
   E) the horizontal average of the individual demand curves of all the buyers.
Answer: C

Topic: Individual and market demand
Skill: Level 1: Definition
Section: Checkpoint 4.1
Status: Old
AACSB: Analytical thinking
28) There are five hundred buyers in the market for cheese. If we know each individual's demand curves, to find the market demand, we must
   A) add the prices that each buyer will pay at every quantity.
   B) add the quantities that each buyer will purchase at every price.
   C) multiply the price times quantity for each buyer and then add the resulting products together.
   D) average the price each buyer is willing to pay for each given quantity.
   E) give up because there is no way to find the market demand.

Answer: B

Topic: Individual and market demand
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACSB: Analytical thinking

29) Market demand curves are obtained by
   A) determining the price each consumer is willing to pay for the good and summing those prices across all consumers.
   B) observing the prices and quantities sold in a market over time and plotting those price-quantity combinations in a graph.
   C) summing the quantities every consumer is willing to buy at each different price.
   D) observing the behavior of an individual consumer in a market.
   E) averaging the quantities every consumer is willing to buy at each different price.

Answer: C

Topic: Individual and market demand
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACSB: Analytical thinking

30) The market demand curve for mousetraps is
   A) found by summing the quantities of mousetraps demanded at each income level by each buyer.
   B) found by summing the prices of mousetraps at each quantity of mousetraps demanded by each buyer.
   C) the horizontal sum of the individual demand curves for mousetraps of all the buyers.
   D) Both answers B and C are correct.
   E) Both answers A and C are correct.

Answer: C

Topic: Individual and market demand
Skill: Level 1: Definition
Section: Checkpoint 4.1
Status: Old
AACSB: Analytical thinking
31) To find the market demand curve for in-line skates, we must
   A) add the quantities demanded at every price and every income by every buyer of in-line skates.
   B) add the quantities demanded at prices that all buyers can afford to pay.
   C) sum horizontally the individual demand curves of all the buyers.
   D) take account of the skate buying plans of all actual and potential buyers in all possible situations.
   E) None of the above answers is correct because we need also to take account of the supply of in-line skates.
Answer: C

Topic: Individual and market demand
Skill: Level 1: Definition
Section: Checkpoint 4.1
Status: Old
AACSBI Analytical thinking

32) The phrase "a change in demand" most directly implies a
   A) movement along a demand curve.
   B) movement along the price curve.
   C) change in the quantity demanded of a good.
   D) shift of the demand curve.
   E) movement along the quantity curve.
Answer: D

Topic: Changes in demand
Skill: Level 1: Definition
Section: Checkpoint 4.1
Status: Old
AACSBI Reflective thinking

33) When demand increases,
   A) consumers are willing to buy more at any price.
   B) consumers buy more of the good only if its price falls.
   C) the price is lower at any level of quantity demanded.
   D) consumers buy more of the good only if its price rises.
   E) the demand curve shifts leftward.
Answer: A

Topic: Changes in demand
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACSBI Reflective thinking
34) A change in the demand for apples could result from any of the following EXCEPT
   A) a change in the number of buyers.
   B) increased preferences for fresh fruit consumption for health reasons.
   C) a change in the price of an apple.
   D) a change in the price of a banana.
   E) a change in income.
   Answer: C
   Topic: Changes in demand
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACS: Reflective thinking

35) Changes in which of the following factors do NOT shift the demand curve?
   A) the price of the good
   B) buyers' incomes
   C) the price of a substitute good
   D) the number of buyers
   E) the price expected in the future
   Answer: A
   Topic: Shifts of the demand curve
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACS: Reflective thinking

36) If the demand for used cars decreases after the price of a new car falls, used cars and new cars are
   A) inferior goods.
   B) substitute goods.
   C) complementary goods.
   D) normal goods.
   E) The questions errs because it is the quantity of used cars, NOT the demand for used cars, that will change when the price of a new car falls.
   Answer: B
   Topic: Changes in demand, price of a substitute
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACS: Reflective thinking
37) Consumers regard Dell computers and Apple computers as substitutes. If the price of a Dell computer decreases, the
   A) demand for Dell computers increases.
   B) demand for Apple computers increases.
   C) demand for Apple computers decreases.
   D) supply of Dell computers increases.
   E) demand for Dell computers decreases.

Answer: C

Topic: Changes in demand, price of a substitute
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACS: Reflective thinking

38) Which of the following increases the demand for a good or service?
   A) a fall in the price of the good or service
   B) a smaller number of consumers wanting to buy the good or service
   C) a rise in the price of the good or service
   D) a rise in the price of a substitute good or service
   E) a rise in the price of a complement

Answer: D

Topic: Changes in demand, price of a substitute
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACS: Reflective thinking

39) Consider the market for smart phones. Which of the following shifts the demand curve rightward?
   A) an increase in the price of smart phones
   B) a decrease in the price of smart phones
   C) an increase in the price of land-line phone service, a substitute for smart phones
   D) a decrease in the number of smart phone buyers
   E) an increase in the supply of smart phones

Answer: C

Topic: Changes in demand, price of a substitute
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACS: Reflective thinking
40) A decrease in the price of driver liability insurance will _______ the _______ for new automobiles.
   A) increase; demand
   B) increase; supply
   C) decrease; demand
   D) decrease; supply
   E) None of the above is correct.

Answer: A  
Topic: Changes in demand, price of a complement  
Skill: Level 3: Using models  
Section: Checkpoint 4.1  
Status: New  
AACS B: Reflective thinking

41) A reduction in the cost of cable TV subscriptions will _______ the _______ for televisions.
   A) increase; supply
   B) increase; demand
   C) decrease; supply
   D) decrease; demand
   E) None of the above is correct.

Answer: B  
Topic: Changes in demand, price of a complement  
Skill: Level 3: Using models  
Section: Checkpoint 4.1  
Status: New  
AACS B: Reflective thinking

42) Which of the following shifts the demand curve for movies rightward?
   A) an increase in the price of NetFlix, a substitute for movies
   B) an increase in the price of movie tickets
   C) a decrease in the price of movie tickets
   D) an increase in movie star salaries
   E) an increase in the price of HDTV sets

Answer: A  
Topic: Change in demand, price of a substitute  
Skill: Level 3: Using models  
Section: Checkpoint 4.1  
Status: Old  
AACS B: Analytical thinking
43) Which of the following shifts the demand curve for movies leftward?
   A) a decrease in the price of NetFlix, a substitute for movies
   B) a decrease in the price of movie tickets
   C) an increase in the price of movie tickets
   D) an increase in movie star salaries
   E) an increase in incomes, assuming movies are a normal good

   Answer: A

   Topic: Change in demand, price of a substitute
   Skill: Level 3: Using models
   Section: Checkpoint 4.1
   Status: Old
   AACS: Analytical thinking

44) Two brands of water, Natural Water and Mountain Water, are close substitutes. If the price of
   Mountain Water decreases, the fall in price
   A) shifts the demand curve for Natural Water rightward.
   B) shifts the demand curve for Natural Water leftward.
   C) increases the price of Natural Water.
   D) increases the demand for Mountain Water.
   E) More information is needed to determine if the demand curve for Natural Water shifts
      rightward or leftward.

   Answer: B

   Topic: Changes in demand, price of a substitute
   Skill: Level 4: Applying models
   Section: Checkpoint 4.1
   Status: Old
   AACS: Reflective thinking

45) Car insurance and cars are complements. If the price of car insurance increases, the
   A) demand for cars decreases.
   B) demand for cars increases.
   C) quantity of cars demanded decreases.
   D) quantity of cars demanded increases.
   E) More information is needed to determine if the demand increases or decreases.

   Answer: A

   Topic: Changes in demand, price of a complement
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACS: Reflective thinking
46) Consumers eat salsa with taco chips. The price of salsa rises. How does the increase in the price of salsa affect the demand for taco chips?
   A) It decreases the demand for taco chips.
   B) It increases the demand for taco chips.
   C) It has no effect on the demand for taco chips.
   D) It will decrease the demand for taco chips only if taco chips are a normal good.
   E) It could increase, decrease, or have no effect on the demand for taco chips, but more information is needed to determine the impact.

Answer: A
Topic: Changes in demand, price of a complement
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACSB: Reflective thinking

47) What happens to the demand for a good if a complement’s price increases?
   A) The demand decreases and the demand curve shifts rightward.
   B) The demand increases and the demand curve shifts rightward.
   C) The demand decreases and the demand curve shifts leftward.
   D) The demand increases and the demand curve shifts leftward.
   E) There is no impact on demand for the good and the demand curve does not shift.

Answer: C
Topic: Changes in demand, price of a complement
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACSB: Reflective thinking

48) Hot dogs and hot dog buns are complements. If the price of a hot dog falls, then
   A) the demand for hot dogs will increase.
   B) the demand for hot dog buns will decrease.
   C) the quantity demanded of hotdogs will decrease.
   D) the demand for hot dog buns will increase.
   E) the quantity demanded of hot dog buns will increase.

Answer: D
Topic: Changes in demand, price of a complement
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACSB: Reflective thinking
49) A popular dinner among college students today is sushi, green tea, and wasabi dip so these foods are complements. If the price of green tea increases and the price of wasabi dip increases, what would be the effect on demand for sushi at lunch?

A) The demand for sushi would decrease.
B) The demand for sushi would be unaffected, but the price would increase.
C) The demand for sushi could increase or decrease.
D) The demand for sushi would increase.
E) The demand for sushi would be unaffected, but the price would decrease.

Answer: A

Topic: Changes in demand, price of a complement
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACS: Reflective thinking

50) Soda and hot dogs are complements for one another. If a shortage of carbonated water leads to an increase in the price of soda, then the

A) demand for hot dogs increases.
B) demand for hot dogs decreases.
C) quantity of hot dogs demanded increases.
D) quantity of hot dogs demanded decreases.
E) More information is needed to determine if the demand increases or decreases.

Answer: B

Topic: Changes in demand, price of a complement
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACS: Reflective thinking

51) A student at New York University used to take the Redhound bus when she visited her grandmother in Boston. After graduating, although the bus fare and the plane fare were the same as they were when she was a student with a well-paid job on Wall Street, she now takes the plane to Boston to visit her grandmother. For this student, travel by Redhound bus is

A) a normal good.
B) an inferior good.
C) a substitute good.
D) a complement good.
E) a good with negative preferences.

Answer: B

Topic: Inferior goods
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACS: Reflective thinking
52) If the demand for digital cameras increases when consumers' incomes rise, then digital cameras are
   A) a normal good.
   B) an inferior good.
   C) a substitute for camcorders.
   D) a complement to camcorders.
   E) made using advanced technology.

Answer: A

Topic: Normal goods
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACSB: Reflective thinking

53) Lesley buys 6 cappuccinos per week when her income is $900 per week and buys 8 cappuccinos per week when her income is $1100 per week. For Lesley, cappuccinos are a(n) _______ good.
   A) normal
   B) luxury
   C) inferior
   D) substitute
   E) essential

Answer: A

Topic: Normal and inferior goods
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: New
AACSB: Reflective thinking

54) If the demand for a good increases when people's incomes increase,
   A) the good is an inferior good.
   B) the law of demand is violated.
   C) the good's demand curve must be slope upward.
   D) the good is a normal good.
   E) the good is a substitute good for an inferior good.

Answer: D

Topic: Changes in demand, normal good
Skill: Level 1: Definition
Section: Checkpoint 4.1
Status: Old
AACSB: Reflective thinking
55) In a recession, consumers have less income to spend. As a result, if dining out is a normal good, then which of the following would happen to the demand curve for dining out?
   A) The demand curve would shift leftward.
   B) The demand curve would not shift, but the price of dining out would rise.
   C) The effect on the demand curve is unknown.
   D) The demand curve would shift rightward.
   E) The demand curve would not shift, but the price of dining out would fall.

   Answer: A
   Topic: Changes in demand, normal good
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Reflective thinking

56) If macaroni and cheese is an inferior good, then a decrease in income results in
   A) an increase in the demand for macaroni and cheese.
   B) a decrease in the demand for macaroni and cheese.
   C) an increase in the supply of macaroni and cheese.
   D) a decrease in the supply of macaroni and cheese.
   E) Both answers A and D are correct.

   Answer: A
   Topic: Changes in demand, inferior good
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Reflective thinking

57) If income increases and the demand for bus rides decreases,
   A) bus rides are a normal good.
   B) consumers are behaving irrationally.
   C) bus rides are an inferior good.
   D) bus rides are a substitute good.
   E) bus rides must be a complement good with some other good.

   Answer: C
   Topic: Changes in demand, inferior good
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Reflective thinking
58) Which of the following is true?
   A) For an inferior good, when income increases, the demand curve shifts leftward.
   B) If the price of a substitute rises, the demand curve shifts leftward.
   C) If people expect the price of a good will rise in the future, the demand curve shifts leftward.
   D) An increase in population shifts the demand curve leftward.
   E) An increase in the cost of producing a good shifts the demand curve leftward.

   Answer: A

   Topic: Changes in demand, inferior good
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACS: Reflective thinking

59) Ramen noodles are a staple food item for many college students. Ramen noodles are very inexpensive, easy to prepare, and can be combined easily with other foods. After students graduate, find employment, and earn a higher income, they decrease their Ramen noodle purchases significantly. In this case, Ramen noodles are
   A) a normal good.
   B) an inferior good.
   C) a complement for higher income people.
   D) a substitute good.
   E) None of the above answers is correct.

   Answer: B

   Topic: Changes in demand, inferior good
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACS: Reflective thinking

60) Water bottlers announce that next month the price of bottled water will rise by 25 percent. Which of the following occurs immediately?
   A) The quantity of bottled water demanded increases.
   B) The quantity of bottled water demanded decreases.
   C) The demand for bottled water decreases.
   D) The demand for bottled water increases.
   E) None of the above answers is correct because it is the supply that immediately changes, not the demand.

   Answer: D

   Topic: Changes in demand, expectations
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACS: Reflective thinking
61) A huge 50 percent off sale on golf clubs is advertised for next week. What happens this week in the market for golf clubs?
   A) The supply of golf clubs increases.
   B) The supply of golf clubs decreases.
   C) The demand for golf clubs increases.
   D) The demand for golf clubs decreases.
   E) The demand for and the supply of golf clubs decreases.

Answer: D  
Topic: Changes in demand, expectations  
Skill: Level 3: Using models  
Section: Checkpoint 4.1  
Status: Old  
AACSBS: Reflective thinking

62) You are just about to finish college and are about to start a high paying job. Because of this new job, what is the most likely outcome in the market for cars?
   A) Your demand for cars will decrease.
   B) The market supply of cars will increase.
   C) Your demand for cars will increase.
   D) The market supply of cars will decrease.
   E) The demand and the supply for cars will decrease.

Answer: C  
Topic: Changes in demand, expectations  
Skill: Level 3: Using models  
Section: Checkpoint 4.1  
Status: Old  
AACSBS: Reflective thinking

63) Which of the following increases the demand for a good?
   A) a rise in the price of a complement  
   B) the expectation that future income will be higher  
   C) an increase in income, assuming the good is an inferior good  
   D) a decrease in the number of buyers  
   E) a fall in the price of a substitute

Answer: B  
Topic: Changes in demand, expectations  
Skill: Level 3: Using models  
Section: Checkpoint 4.1  
Status: Old  
AACSBS: Reflective thinking
64) Suppose that tattoos gained immense popularity with retired people as well as college students. This gain in popularity best reflects which of the following influences on buying plans?
   A) the price of a substitute good
   B) income
   C) expectations
   D) preferences
   E) the price of a complement good

Answer: D

Topic: Changes in demand, preferences
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACSB: Reflective thinking

65) Consider the market for cellular phones. Which of the following shifts the demand curve leftward?
   A) studies showing using cellular phones can cause brain cancer
   B) a decrease in the price of cellular phones
   C) a decrease in the quantity demanded of cellular phones
   D) an increase in the services provided by cellular phones, such as text messaging
   E) an increase in the price of cellular phones

Answer: A

Topic: Changes in demand, preferences
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACSB: Reflective thinking
66) Scooters and bicycles are substitutes. Suppose that the price of a bicycle falls. Which of the figures above best illustrates how this fall in price affects the demand curve for scooters?

A) Figure A
B) Figure B
C) Figure C
D) Figure D
E) None of the above answers is correct because the change in the price of a bicycle will affect the supply curve not the demand curve.

Answer: B

Topic: Changes in demand, price of a substitute
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACSB: Analytical thinking
67) Scooters are a normal good and buyers' incomes decrease. Which of the figures above best illustrates how this change affects the demand curve for scooters?

A) Figure A  
B) Figure B  
C) Figure C  
D) Figure D  
E) None of the above answers is correct because the decrease in income will affect the supply curve not the demand curve.

Answer: B  

Topic: Changes in demand, normal good  
Skill: Level 3: Using models  
Section: Checkpoint 4.1  
Status: Old  
AACSB: Analytical thinking

68) Over the next few years more and more people prefer to ride on scooters. Which of the figures above best illustrates how this change affects the demand curve for scooters?

A) Figure A  
B) Figure B  
C) Figure C  
D) Figure D  
E) None of the above answers is correct because the change in tastes will affect the supply curve not the demand curve.

Answer: A  

Topic: Changes in demand, number of buyers  
Skill: Level 3: Using models  
Section: Checkpoint 4.1  
Status: Old  
AACSB: Analytical thinking

69) A scooter uses much less gasoline than does a car. Suppose the price of gasoline rises substantially. Which of the figures above best illustrates how this change affects the demand curve for scooters?

A) Figure A only  
B) Figure B only  
C) Figure C only  
D) Figure D only  
E) Both Figure A and Figure D

Answer: A  

Topic: Changes in demand, preferences  
Skill: Level 3: Using models  
Section: Checkpoint 4.1  
Status: Old  
AACSB: Analytical thinking
70) In the above figure, the movement from point $a$ to point $b$ reflects
A) a decrease in the price of pizza.
B) an increase in the demand for pizza.
C) an increase in the number of people who eat pizza.
D) an increase in the price of the tomato sauce used to produce pizza.
E) a decrease in the number of firms producing pizza.

Answer: A

Topic: Changes in quantity demanded
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACS: Analytical thinking

71) In the above figure, the shift in the demand curve from $D$ to $D_1$ can be the result of
A) an increase in the price of pizza.
B) an increase in the price of a sub sandwich, a substitute for pizza.
C) an increase in the price of soda, a complement to pizza.
D) a change in quantity demanded.
E) a decrease in income if pizza is a normal good.

Answer: B

Topic: Changes in demand, price of a substitute
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACS: Analytical thinking
72) In the above figure, the shift in the demand curve from $D$ to $D_2$ can be the result of
A) an increase in income if pizza is a normal good.
B) an increase in the price of a sub sandwich, a substitute for pizza.
C) an increase in the price of soda, a complement to pizza.
D) a change in quantity demanded.
E) a decrease in the supply of pizza that raises the price of pizza.

Answer: C

Topic: Changes in demand, price of a complement
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACSBB: Analytical thinking

73) The figure above shows the market for iPods. Which of the following creates a movement from point A to point B?
A) a requirement that all students at universities have an iPod
B) a decrease in the price of iPods
C) a decrease in the price of Zunes, a substitute for iPods
D) an increase in the price of iPods
E) an increase in people’s incomes

Answer: B

Topic: Changes in quantity demanded
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACSBB: Analytical thinking
74) The figure above shows the market for iPods. Which of the following shifts the demand curve from $D_0$ to $D_1$?

A) a decrease in the price of Zunes, a substitute for iPods  
B) an increase in the price of iPods  
C) a requirement that all students at universities have an iPod  
D) a decrease in the price of iPods  
E) an increase in people's incomes

Answer: A

Topic: Changes in demand  
Skill: Level 3: Using models  
Section: Checkpoint 4.1  
Status: Old  
AACSB: Analytical thinking

75) The figure above shows the market for iPods. Which of the following shifts the demand curve from $D_0$ to $D_2$?

A) a decrease in the price of Zunes, a substitute for iPods  
B) an increase in the price of iPods  
C) a requirement that all students at universities have an iPod  
D) a decrease in the price of iPods  
E) a decrease in people's incomes if iPods are a normal good

Answer: A

Topic: Changes in demand  
Skill: Level 3: Using models  
Section: Checkpoint 4.1  
Status: Old  
AACSB: Analytical thinking
76) Pizza is a normal good. In the above figure, the shift in the demand curve from $D$ to $D_2$ can be the result of
   A) a decrease in the price of soda, a complement to pizza.
   B) an increase in the price of hamburgers, a substitute for pizza.
   C) a decrease in income.
   D) a study that shows that pizza is a very healthy food.
   E) an increase in the cost of producing pizza.
Answer: C

Topic: Changes in demand, normal good
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACSB: Analytical thinking

77) In the above figure, the shift in the demand curve from $D$ to $D_1$ can be the result of
   A) a decrease in income if pizza is a normal good.
   B) a decrease in the price of a sub sandwich, a substitute for pizza.
   C) an increase in the price of soda, a complement to pizza.
   D) an increase in the number of teenagers, all of whom demand more pizza than do other age groups.
   E) new technology that increases the profit from producing pizza.
Answer: D

Topic: Changes in demand, number of buyers
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACSB: Analytical thinking
78) In the above figure, _______ will shift in the demand curve from $D$ to $D_1$.
   A) an increase in income if pizza is an inferior good
   B) a decrease in the price of a sub sandwich, a substitute for pizza
   C) buyers’ expectation that pizza will be less expensive next week
   D) a scientific article published that demonstrates eating pizza is good for one’s health
   E) a fall in the cost of producing pizza

Answer: D

Topic: Changes in demand, preferences
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACS B: Analytical thinking

79) Which of the following brings only an increase in the quantity demanded of a good?
   A) a decrease in income, assuming the good is an inferior good
   B) a rise in the price of a substitute good
   C) a fall in the price of the good itself
   D) an expectation that the good’s price will rise in the future
   E) a decrease in income, assuming the good is a normal good

Answer: C

Topic: Quantity demanded versus demand
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACS B: Reflective thinking

80) People consume more soup as temperatures falls. So, as cold weather approaches,
   A) the quantity of soup demanded increases.
   B) the demand for soup increases.
   C) people move closer to their demand curve for soup.
   D) people move farther beyond their demand curves.
   E) both the demand for and the quantity of soup demanded increase.

Answer: B

Topic: Quantity demanded versus demand
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACS B: Reflective thinking
81) The impact of an increase in the price of a particular good is illustrated as a
   A) leftward shift in its demand curve.
   B) rightward shift in its demand curve.
   C) movement upward and to the left along its demand curve.
   D) movement downward and to the right along its demand curve.
   E) rightward shift in its demand curve and a movement upward and to the left along its demand curve.

   Answer: C

   Topic: Movement along the demand curve
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Analytical thinking

82) Which of the following events will increase the quantity demanded of bottled water?
   A) a fall in the price of soda
   B) a rise in the price of a fitness club membership
   C) an increase in the number of buyers of bottled water
   D) a fall in the price of bottled water
   E) a rise in the price of bottled water

   Answer: D

   Topic: Changes in quantity demanded
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Analytical thinking
### Table 4.1.1: Demand Schedule for Lattes at the Bottomless Cup

<table>
<thead>
<tr>
<th>Price (dollars per latte)</th>
<th>Quantity demanded (lattes per hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>90</td>
</tr>
<tr>
<td>2</td>
<td>80</td>
</tr>
<tr>
<td>3</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td>30</td>
</tr>
</tbody>
</table>

83) The table above gives the demand schedule for lattes at the Bottomless Cup. If the price of a latte is $3, then the quantity of lattes demanded is ________ an hour.

A) 90  B) 30  C) 80  D) 60  E) 230

Answer: D

Topic: Quantity demanded
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACSBI: Analytical thinking

84) Other things remaining the same, the quantity of a good or service demanded will increase if the price of the good or service

A) rises.  B) falls.  C) does not change.  D) rises or does not change.  E) rises or falls.

Answer: B

Topic: Law of demand
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACSBI: Reflective thinking

85) The "law of demand" indicates that if the University of Maine increases tuition, all other things remaining the same,

A) the demand for classes will decrease at the University of Maine.  B) the demand for classes will increase at the University of Maine.  C) the quantity of classes demanded will increase at the University of Maine.  D) the quantity of classes demanded will decrease at the University of Maine.  E) both the demand for and the quantity of classes demanded will decrease at the University of Maine.

Answer: D

Topic: Law of demand
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACSBI: Reflective thinking
86) The graph illustrates the demand for peanuts. Peanuts are a normal good because the
A) demand curve for peanuts slopes downward.
B) demand for peanuts increases when income increases.
C) demand for peanuts increases when the price of one of its substitutes rises.
D) peanuts have both substitutes and complements.
E) demand curve shows that if the price of peanuts rises, there is a movement along the
demand curve to a lower quantity demanded.
Answer: B
Topic: Normal goods
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACSBI: Analytical thinking

87) A normal good is defined as a good
A) with a downward sloping demand curve.
B) for which demand increases when the price of a substitute rises.
C) for which demand increases when income increases.
D) for which demand increases when the number of demanders increases.
E) for which demand increases when the price of a complement falls.
Answer: C
Topic: Normal goods
Skill: Level 1: Definition
Section: Checkpoint 4.1
Status: Old
AACSBI: Reflective thinking
88) Soda and peanuts are complements. Other influences on buying plans remaining the same, a rise in the price of soda
   A) increases the demand for peanuts.
   B) decreases the demand for peanuts.
   C) decreases the demand for soda.
   D) increases the demand for soda.
   E) has no effect on the demand for peanuts, though it does change the quantity demanded of peanuts.

Answer: B

Topic: Changes in demand, price of a complement
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACS B: Reflective thinking

89) People come to expect that the price of a gallon of gasoline will rise next week. As a result,
   A) today’s supply of gasoline increases.
   B) today’s demand for gasoline increases.
   C) the price of a gallon of gasoline falls today.
   D) next week’s supply of gasoline decreases.
   E) today’s demand for gasoline and today’s supply of gasoline do not change.

Answer: B

Topic: Changes in demand, expectations
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACS B: Reflective thinking
90) One reason the demand for laptop computers might increase is a
   A) fall in the price of a laptop computers.
   B) fall in price of desktop computers.
   C) change in preferences as laptops have become more portable, with faster processors and
      larger hard drives.
   D) poor quality performance record for laptop computers.
   E) decrease in income if laptops are a normal good.

   Answer: C

   Topic: Changes in demand, preferences
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Reflective thinking

91) Teenagers drink more soda than other age groups. If the number of teenagers increases,
   everything else remaining the same,
   A) market demand for soda increases.
   B) market demand for soda decreases.
   C) market demand for soda does not change.
   D) there is a movement along the market demand curve for soda.
   E) None of the above answers is correct because the effect on the demand depends whether
      the supply curve shifts rightward, leftward, or not at all.

   Answer: A

   Topic: Changes in demand, number of buyers
   Skill: Level 3: Using models
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Reflective thinking

92) The number of buyers of sport utility vehicles, SUVs, decreases sharply. So the
   A) demand curve for SUVs shifts leftward.
   B) demand curve for SUVs shifts rightward.
   C) demand curve for SUVs does not shift, nor is there a movement along then demand
      curve.
   D) demand curve for SUVs does not shift, but there is a movement downward along it.
   E) supply curve for SUVs shifts rightward.

   Answer: A

   Topic: Changes in demand, number of buyers
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACSB: Reflective thinking
93) When moving along a demand curve, which of the following changes?
   A) the consumers’ incomes
   B) the prices of other goods
   C) the number of buyers
   D) the price of the good
   E) the consumers’ preferences

   Answer: D
   Topic: Movement along the demand curve
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACS: Reflective thinking

94) The graph illustrates the demand curve for soda. After a rise in the price of a soda from $1.00 a can to $2.00 a can, the quantity of soda demanded
   A) decreases from 2 cans to 0 cans a day.
   B) increases from 0 cans to 2 cans a day.
   C) remains unchanged.
   D) decreases from 1 can to 0 cans a day.
   E) cannot be determined from the figure because the demand curve will shift to a new curve.

   Answer: A
   Topic: Movement along the demand curve
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.1
   Status: Old
   AACS: Analytical thinking
95) Pizza and tacos are substitutes, and the price of a pizza increases. Which of the following correctly indicates what happens?
   A) The demand for pizzas decreases and the demand for tacos increases.
   B) The demand for both goods decreases.
   C) The quantity of tacos demanded increases and the quantity of pizza demanded decreases.
   D) The quantity of pizza demanded decreases and the demand for tacos increases.
   E) The demand for each decreases because both are normal goods.

Answer: D
Topic: Changes in quantity demanded versus change in demand
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACSB: Reflective thinking

96) If the price of a DVD falls,
   i. the demand curve for DVDs will shift rightward.
   ii. the demand curve for DVDs will not shift.
   iii. there will be a movement along the demand curve for DVDs.

   A) i only       B) ii only       C) iii only       D) ii and iii       E) i and iii

Answer: D
Topic: Shifts in the demand curve versus movements along the demand curve
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACSB: Analytical thinking

4.2 Supply

1) To be part of the supply for a good, a producer must be
   A) only able to supply the good.
   B) only willing to supply the good.
   C) both able and willing to supply the good.
   D) both able and willing to supply the good, and have already identified a buyer.
   E) both able and willing to supply the good, and have already sold the good.

Answer: C
Topic: Producers
Skill: Level 1: Definition
Section: Checkpoint 4.2
Status: Old
AACSB: Reflective thinking
2) The quantity supplied of a good or service is the
   A) list of all quantities at different prices, as illustrated by a supply schedule and a supply curve.
   B) list of all quantities at different prices, as illustrated by a demand schedule and a demand curve.
   C) one quantity produced at a variety of prices.
   D) quantity produced at one price.
Answer: D

Topic: Quantity supplied
Skill: Level 1: Definition
Section: Checkpoint 4.2
Status: Old
AACSBI: Reflective thinking

3) The law of supply states that, other things remaining the same,
   A) demand increases when supply increases.
   B) if the price of a good increases, firms buy less of it.
   C) if the price of a good increases, the quantity supplied increases.
   D) as people’s income increases, the supply of goods increases.
   E) if the price of a good increases, the supply increases.
Answer: C

Topic: Law of supply
Skill: Level 1: Definition
Section: Checkpoint 4.2
Status: Old
AACSBI: Reflective thinking

4) The law of supply states that other things remaining the same, a decrease in the price of a kayak leads to
   A) a decrease in the supply of kayaks.
   B) a decrease in the quantity of kayaks supplied.
   C) an increase in the supply of kayaks.
   D) an increase in the quantity of kayaks supplied.
   E) an increase in the supply of kayaks and a decrease in the quantity of kayaks supplied.
Answer: B

Topic: Law of supply
Skill: Level 2: Using definitions
Section: Checkpoint 4.2
Status: Old
AACSBI: Reflective thinking
5) Which of the following helps explain why the law of supply exists?
   A) Larger outputs result in lower costs of production.
   B) The law of increasing opportunity cost
   C) The costs of production remain constant throughout all levels of output.
   D) Sellers realize that if the price increases, they make larger profits and do not need to change their production.
   E) The law of demand

   Answer: B

6) The law of supply reflects the fact that
   A) people buy more of a good when its price falls.
   B) suppliers have an incentive to use their resources in the way that brings the biggest return.
   C) higher prices are more attractive to consumers because they signal a higher quality product.
   D) businesses can sell more goods at lower prices.
   E) the demand curve is downward sloping.

   Answer: B

7) The supply schedule
   A) shows the relationship between the quantity supplied and the price of a good when all other influences on selling plans remain the same.
   B) is a curve showing the relationship between the amount the sellers are willing and able to sell and the price of that good when all relevant factors change.
   C) shows one quantity at one price.
   D) is the schedule that suppliers have to keep or else they will be late.
   E) shows the relationship between the quantity supplied and the price of a good when all other influences on selling plans change.

   Answer: A
8) A supply curve
   A) slopes downward.
   B) slopes upward.
   C) is a graph of the relationship between quantity supplied of a good and its price.
   D) Both answers B and C are correct.
   E) Both answers A and C are correct.

Answer: D

Topic: Supply curve
Skill: Level 1: Definition
Section: Checkpoint 4.2
Status: Old
AACSB: Reflective thinking

9) Which of the following results in a movement upward along the supply curve for movies in theaters?
   A) an increase in the price of movie tickets
   B) a decrease in the price of movie tickets
   C) a decrease in the price of downloaded movies
   D) a decrease in movie star salaries
   E) an increase in the number of theaters

Answer: A

Topic: Changes in quantity supplied
Skill: Level 3: Using models
Section: Checkpoint 4.2
Status: Old
AACSB: Analytical thinking

10) If the price of iPods decreases,
    A) there will be a movement down along the supply curve for iPods.
    B) there will be a rightward shift in the iPod supply curve.
    C) there will be a movement up along the supply curve for iPods.
    D) the supply curve for iPods shifts leftward.
    E) there has been a decrease in the price of iTunes songs.

Answer: A

Topic: Changes in quantity supplied
Skill: Level 3: Using models
Section: Checkpoint 4.2
Status: Old
AACSB: Analytical thinking
11) Which of the following increases the quantity supplied of compact discs but does **NOT** increase the supply of compact discs?
   A) a decrease in the price of a compact disc
   B) an increase in the price of a compact disc
   C) a decrease in the number of suppliers of compact discs
   D) an increase in the price of the resources used to produce compact discs
   E) new technology that lowers the cost of producing compact discs

   **Answer:** B

   **Topic:** Changes in quantity supplied versus change in supply
   **Skill:** Level 2: Using definitions
   **Section:** Checkpoint 4.2
   **Status:** Old
   **AACSB:** Reflective thinking

12) Which of the following increases the supply of a product?
   A) lower prices for the resources used to produce the product
   B) some producers going bankrupt and leaving the industry
   C) a higher price for the product
   D) an increase in the expected future price of the product
   E) a decrease in productivity

   **Answer:** A

   **Topic:** Changes in supply
   **Skill:** Level 2: Using definitions
   **Section:** Checkpoint 4.2
   **Status:** Old
   **AACSB:** Reflective thinking

13) Which of the following does **NOT** increase the supply of personal computers, that is, does **NOT** shift the supply curve of personal computers?
   A) an advance in the technology used to produce personal computers
   B) an increase in the number of firms producing personal computer
   C) a fall in the cost of the components used to assemble personal computers
   D) a rise the price of a personal computer
   E) a change in the expected future price of a personal computer

   **Answer:** D

   **Topic:** Changes in supply
   **Skill:** Level 2: Using definitions
   **Section:** Checkpoint 4.2
   **Status:** Old
   **AACSB:** Reflective thinking
14) Which of the following shifts the supply curve of rutabagas rightward? (A rutabaga is a potato-like vegetable.)
   A) an increase in the price of a rutabaga
   B) an exceptionally cold summer that killed much of the rutabaga crop
   C) a fall in the price of fertilizer used to grow rutabagas
   D) Both answers A and C shift the supply curve of rutabagas rightward.
   E) Both answers A and B shift the supply curve of rutabagas rightward.

Answer: C

Topic: Shifts of the supply curve
Skill: Level 2: Using definitions
Section: Checkpoint 4.2
Status: Old
AACSBS: Reflective thinking

15) Mulch is shredded wood and is a by-product in the production of lumber. Because these two goods are produced together, they are
   A) complements in production.
   B) substitutes in production.
   C) inputs into the same production process.
   D) not related.
   E) normal goods in production.

Answer: A

Topic: Complements in production
Skill: Level 2: Using definitions
Section: Checkpoint 4.2
Status: Old
AACSBS: Reflective thinking

16) A decrease in the price of a complement in production leads to
   A) a decrease in the supply of the good in question.
   B) an increase in the supply of the good in question.
   C) no change in the supply of the good in question.
   D) a decrease in the quantity supplied of the good in question.
   E) an increase in the supply of the good in question and a decrease in the quantity supplied of the good in question.

Answer: A

Topic: Changes in supply, price of a complement in production
Skill: Level 1: Definition
Section: Checkpoint 4.2
Status: Old
AACSBS: Reflective thinking
17) Milk can be used to produce cheese or butter. If the price of a pound of butter rises, what happens to the supply of cheese?
   A) The supply of cheese increases.
   B) The supply of cheese decreases.
   C) The supply of cheese stays the same and there is no change in the quantity supplied of cheese.
   D) The supply of cheese stays the same and there is a decrease in the quantity supplied of cheese.
   E) The supply of cheese could increase, decrease, or stay the same depending on what happens to the supply of butter.

   Answer: B

   Topic: Changes in supply, price of a substitute in production
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.2
   Status: Old
   AACSBS: Reflective thinking

18) Oil refiners can refine a barrel of petroleum so that it yields either more home heating oil or more diesel fuel. If the price of diesel fuel falls, there is
   A) an increase in the supply of home heating oil.
   B) a decrease in the supply of home heating oil.
   C) an increase in the quantity of home heating oil supplied.
   D) a decrease in the quantity of home heating oil supplied.
   E) an increase in the demand for home heating oil.

   Answer: A

   Topic: Changes in supply, price of a substitute in production
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.2
   Status: Old
   AACSBS: Reflective thinking

19) Which of the following increases the supply of gasoline?
   A) a situation where the quantity of gasoline demanded exceeds the quantity supplied
   B) an increase in the price of gasoline
   C) a decrease in the price of a resource used to produce gasoline, such as crude oil
   D) a decrease in the demand for gas-guzzling, sport utility vehicles
   E) an increase in income if gas-guzzling, sport utility vehicles are a normal good

   Answer: C

   Topic: Changes in supply, price of a resource
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.2
   Status: Old
   AACSBS: Reflective thinking
20) The United Auto Workers bargained for higher wages and more benefits for autoworkers. As a result of the higher wages and increased benefits,

i. the quantity of new automobiles supplied decreases.

ii. the supply of new automobiles decreases.

iii. the supply of new automobiles increases.

A) only i
B) only ii
C) only iii
D) both i and ii
E) Neither i, ii, nor iii is correct.

Answer: B

Topic: Changes in supply, price of a resource
Skill: Level 4: Applying models
Section: Checkpoint 4.2
Status: Old
AACSBO: Reflective thinking

21) If the automobile workers' union successfully negotiates a wage increase for its members, how does the wage hike affect the supply of automobiles?

A) The supply increases.
B) The supply decreases.
C) The quantity supplied increases.
D) The quantity supplied decreases.
E) Both answers B and D are correct.

Answer: B

Topic: Changes in supply, price of a resource
Skill: Level 4: Applying models
Section: Checkpoint 4.2
Status: Old
AACSBO: Reflective thinking

22) Plywood is used in the construction of houses. If the price of plywood rises, what happens to the supply of houses?

A) The supply increases so that the supply curve shifts rightward.
B) The supply decreases so that the supply curve shifts leftward.
C) The quantity supplied increases but there is no shift in the supply curve.
D) The quantity supplied decreases but there is no shift in the supply curve.
E) The quantity supplied decreases and the supply curve shifts leftward.

Answer: B

Topic: Changes in supply, price of a resource
Skill: Level 4: Applying models
Section: Checkpoint 4.2
Status: Old
AACSBO: Reflective thinking
23) It is expected that the price of a bushel of wheat will increase in one month. This belief will result in
   A) an increase in the current supply of wheat.
   B) a decrease in the current supply of wheat.
   C) a decrease in the future supply of wheat.
   D) no change in the current or future supply of wheat.
   E) an increase in the current quantity supplied of wheat.

   Answer: B

24) If aluminum producers expect aluminum prices to fall in the future, this belief shifts the current _______ curve for aluminum to the ________.
   A) demand; right
   B) demand; left
   C) supply; right
   D) supply; left
   E) None of the above is correct.

   Answer: C

25) If the number of companies producing memory chips increases, then the
   A) supply of memory chips does not change.
   B) supply of memory chips increases.
   C) supply of memory chips decreases.
   D) quantity of memory chips supplied increases.
   E) demand for memory chips increases.

   Answer: B
26) An increase in the number of fast-food restaurants
   A) raises the price of fast-food meals.
   B) increases the demand for fast-food meals.
   C) increases the supply of fast-food meals.
   D) increases the demand for substitutes for fast-food meals.
   E) increases both the demand and supply of fast-food meals.

Answer: C

27) An increase in the number of pineapple growers results in
   A) an increase in the quantity of pineapples supplied and no shift in the supply curve of
      pineapples.
   B) an increase in the supply of pineapples and a rightward shift in the supply curve of
      pineapples.
   C) an increase in the supply of pineapples and a leftward shift in the supply curve of
      pineapples.
   D) no change in the supply of pineapples and a movement along the supply curve of
      pineapples.
   E) None of the above answers is correct.

Answer: B

28) If the number of sellers decreases, then the supply curve _______ and the supply _______
    A) shifts rightward; increases
    B) shifts rightward; decreases
    C) shifts leftward; increases
    D) shifts leftward; decreases
    E) does not shift; does not change, but there is a decrease in the quantity supplied

Answer: D
29) Which of the following results in an increase in the supply of a good or service?
   A) a fall in the price of the good or service
   B) a smaller number of sellers producing the good or service
   C) an increase in foreign imports of the good or service
   D) higher taxes imposed upon producers of the good or service
   E) a rise in the price of the good or service

   Answer: C

   Topic: Changes in supply, number of sellers
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.2
   Status: Old
   AACSB: Reflective thinking

30) Researchers have found a hybrid of corn that is cheaper to grow. This technological breakthrough
   A) increases the demand for corn.
   B) increases the supply of corn.
   C) decreases the supply of corn.
   D) Both answers A and C are correct.
   E) Both answers A and B are correct.

   Answer: B

   Topic: Changes in supply, productivity
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.2
   Status: Old
   AACSB: Reflective thinking

31) Suppose over the next several years the productivity of firms producing electric cars improves dramatically. The advance in productivity leads to
   A) a decrease in the supply of electric cars so that the supply curve shifts leftward.
   B) a decrease in the supply of electric cars so that the supply curve shifts rightward.
   C) an increase in the supply of electric cars so that the supply curve shifts leftward.
   D) an increase in the supply of electric cars so that the supply curve shifts rightward.
   E) no change in the supply of electric cars, only a change in the quantity supplied of electric cars.

   Answer: D

   Topic: Changes in supply, shifts of the supply curve
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.2
   Status: Old
   AACSB: Reflective thinking
32) Which of the following increases the supply of a good and shifts its supply curve rightward?
   A) a smaller number of producers
   B) a higher wage paid to workers in the industry
   C) a technological advance in how the good is produced
   D) an increase in the cost of the resources used to produce the good
   E) an increase in the price of the good

Answer: C

Topic: Changes in supply, productivity
Skill: Level 2: Using definitions
Section: Checkpoint 4.2
Status: Old
AACSB: Reflective thinking

33) Which of the following increases the supply of a good?
   A) There is a decrease in the price of a complement in production.
   B) Producers expect higher prices for the good in the future.
   C) Productivity improves.
   D) Prices of inputs used to produce the good rise.
   E) The number of producers decreases.

Answer: C

Topic: Changes in supply, productivity
Skill: Level 2: Using definitions
Section: Checkpoint 4.2
Status: Old
AACSB: Reflective thinking

34) Advances in productivity increase supply because they might
   A) increase the price expected in the future.
   B) decrease the number of goods available.
   C) decrease the cost of production.
   D) raise the prices of resources used to produce the good.
   E) increase the number of firms producing the good.

Answer: C

Topic: Changes in supply, productivity
Skill: Level 3: Using models
Section: Checkpoint 4.2
Status: Old
AACSB: Reflective thinking
35) The number of corn producers increases, so the supply of corn _______ and the supply curve of corn _______.

A) increases; shifts rightward  
B) increases; shifts leftward  
C) decrease; shifts rightward  
D) decreases; shifts leftward  
E) increases; does not shift

Answer: A

36) Which of the following shifts the supply curve for oranges?

A) disastrous weather that destroys about half of this year’s orange crop  
B) a newly discovered increase in the nutritional value of oranges  
C) an increase in the price of bananas, a substitute in consumption for oranges  
D) an increase in income for all orange consumers if oranges are a normal good  
E) an increase in the number of orange consumers

Answer: A

37) Because of the high cost of fuel, railroads such as Union Pacific Corp and CSX Corp have increased the price they charge to haul freight. This change means that

A) the demand curve for hauling freight has shifted leftward.  
B) the supply curve for hauling freight has shifted leftward.  
C) the demand curve for hauling freight has shifted rightward.  
D) the supply curve for hauling freight has shifted rightward.  
E) neither the supply curve nor the demand curve for hauling freight has shifted; the only change is that the price is higher.

Answer: B
38) Which of the following shifts the supply curve of popcorn leftward?
   A) a decrease in the price of popcorn
   B) an increase in the price of popcorn
   C) a technological development in the production of popcorn
   D) a decrease in the number of popcorn suppliers
   E) a decrease in the cost of producing popcorn

Answer: D

Topic: Shifts of the supply curve
Skill: Level 3: Using models
Section: Checkpoint 4.2
Status: Old
AACS: Analytical thinking

39) In the above figure, the movement from point a to point b reflects
   A) an increase in the price of pizza.
   B) an increase in the supply of pizza.
   C) an increase in the number of producers of pizza.
   D) a decrease in the cost of the tomato sauce used to produce pizza.
   E) a decrease in income if pizza is a normal good.

Answer: A

Topic: Changes in quantity supplied
Skill: Level 3: Using models
Section: Checkpoint 4.2
Status: Old
AACS: Analytical thinking
40) In the above figure, the shift in the supply curve from $S$ to $S_1$ reflects
   A) an increase in the quantity of pizza supplied.
   B) a decrease in the quantity of pizza supplied.
   C) an increase in the supply of pizza.
   D) a decrease in the supply of pizza.
   E) None of the above answers is correct.

Answer: D

Topic: Changes in supply
Skill: Level 3: Using models
Section: Checkpoint 4.2
Status: Old
AACSB: Analytical thinking

41) In the above figure, the shift in the supply curve from $S$ to $S_2$ reflects
   A) an increase in the quantity of pizza supplied.
   B) a decrease in the quantity of pizza supplied.
   C) an increase in the supply of pizza.
   D) a decrease in the supply of pizza.
   E) a decrease in the supply of pizza and a simultaneous decrease in the quantity of pizza supplied.

Answer: C

Topic: Changes in supply
Skill: Level 3: Using models
Section: Checkpoint 4.2
Status: Old
AACSB: Analytical thinking

42) In the above figure, the shift in the supply curve from $S$ to $S_2$ might reflect
   A) a decrease in the cost of the tomato sauce used to produce pizza.
   B) a decrease in the number of pizza producers.
   C) an increase in the price of a pizza.
   D) an increase in income if pizza is a normal good.
   E) an increase in the price of a good that is a substitute for consumers.

Answer: A

Topic: Shifts of the supply curve, number of sellers
Skill: Level 3: Using models
Section: Checkpoint 4.2
Status: Old
AACSB: Analytical thinking
43) In the above figure, an increase in cost of the cheese used to produce pizza
   A) shifts the supply curve from $S$ to $S_1$.
   B) shifts the supply curve from $S$ to $S_2$.
   C) results in a movement from point $a$ to point $b$.
   D) results in a movement from point $b$ to point $a$.
   E) has no effect.
   Answer: A

Topic: Shifts of the supply curve, cost of resources
Skill: Level 3: Using models
Section: Checkpoint 4.2
Status: Old
AACSB: Analytical thinking

44) In the above figure, an increase in productivity
   A) shifts the supply curve from $S$ to $S_1$.
   B) shifts the supply curve from $S$ to $S_2$.
   C) results in a movement from point $a$ to point $b$.
   D) results in a movement from point $b$ to point $a$.
   E) has no effect.
   Answer: B

Topic: Shifts of the supply curve, productivity
Skill: Level 3: Using models
Section: Checkpoint 4.2
Status: Old
AACSB: Analytical thinking
45) The above figure shows the market for laptops. Which of the following causes a movement from A to B?
   A) a decrease in the number of laptop manufactures and sellers
   B) an increase in the productivity of the workers manufacturing laptops
   C) an increase in the cost of hard drives
   D) an increase in the price of laptops
   E) a decrease in the price of laptops

   Answer: D
   *Topic: Changes in quantity supplied*
   *Skill: Level 3: Using models*
   *Section: Checkpoint 4.2*
   *Status: Old*
   *AACSB: Analytical thinking*

46) The above figure shows the market for laptops. Which of the following causes a movement from B to A?
   A) an increase in the cost of hard drives
   B) an increase in the productivity of the workers manufacturing laptops
   C) a decrease in the price of laptops
   D) an increase in the price of laptops
   E) an increase in the number of laptop manufactures and sellers

   Answer: C
   *Topic: Changes in quantity supplied*
   *Skill: Level 3: Using models*
   *Section: Checkpoint 4.2*
   *Status: Old*
   *AACSB: Analytical thinking*
47) The above figure shows the market for laptops. Which of the following shifts the supply curve from $S_0$ to $S_2$?

A) an increase in the cost of hard drives  
B) an increase in the productivity of the workers manufacturing laptops  
C) a decrease in the price of laptops  
D) an increase in the price of laptops  
E) a decrease in the number of laptop manufactures and sellers

Answer: B  
Topic: Changes in supply, productivity  
Skill: Level 3: Using models  
Section: Checkpoint 4.2  
Status: Old  
AACSBA: Analytical thinking

48) The above figure shows the market for laptops. Which of the following shifts the supply curve from $S_0$ to $S_1$?

A) an increase in the cost of hard drives  
B) a decrease in the price of laptops  
C) an increase in the number of laptop manufactures and sellers  
D) an increase in the price of laptops  
E) an increase in the productivity of the workers manufacturing laptops

Answer: A  
Topic: Changes in supply, price of a resource  
Skill: Level 3: Using models  
Section: Checkpoint 4.2  
Status: Old  
AACSBA: Analytical thinking
49) The above figure illustrates the market for corn. If point "a" represents the original equilibrium and point "b" the new equilibrium, which of the following could have caused the change?

A) an increase in consumers' preferences for corn
B) an increase in consumers' income if corn is a normal good
C) an increase in labor costs of producing corn
D) an improvement in the technology of producing corn
E) an increase in consumers' income if corn is an inferior good

Answer: D

Topic: Shifts of the supply curve, productivity
Skill: Level 3: Using models
Section: Checkpoint 4.2
Status: Old
AACSBI: Analytical thinking

50) The above figure illustrates the market for corn. If point "a" represents the original equilibrium and point "b" the new equilibrium, which of the following could have caused the change?

A) an increase in the number of corn growers
B) an increase the price of wheat, a substitute in production for corn
C) an increase in the cost of the fertilizer used to grow the corn
D) a belief among corn farmers that the price of a bushel of corn will be higher next month
E) an increase in income if corn is a normal good

Answer: A

Topic: Shifts of the supply curve, number of sellers
Skill: Level 3: Using models
Section: Checkpoint 4.2
Status: Old
AACSBI: Analytical thinking
51) The above figure illustrates the market for corn. If point "a" represents the original equilibrium and point "b" the new equilibrium, which of the following could have caused the change?
   A) a decrease in the number of corn growers
   B) a decrease the price of wheat, a substitute in production for corn
   C) an increase in the cost of the seed used to grow the corn
   D) a decrease in buyers' incomes if corn is an inferior good
   E) an increased belief among buyers that corn is healthy

   Answer: B

   Topic: Shifts of the supply curve, price of a substitute in production
   Skill: Level 3: Using models
   Section: Checkpoint 4.2
   Status: Old
   AACSB: Analytical thinking

52) In the figure above, if point "a" represents the original equilibrium and point "b" the new equilibrium, then
   A) there has been an increase in supply.
   B) there has been an increase in demand.
   C) there has been a change in the quantity supplied and no change in supply.
   D) Both answers B and C are correct.
   E) Both answers A and B are correct.

   Answer: A

   Topic: Shifts of the supply curve
   Skill: Level 3: Using models
   Section: Checkpoint 4.2
   Status: Old
   AACSB: Analytical thinking

53) Autoworkers negotiate a wage increase. How does this change affect the supply curve of cars?
   A) It shifts the supply curve leftward.
   B) It shifts the supply curve rightward.
   C) It does not shift the supply curve or create a movement along it.
   D) The supply curve will shift but there is not enough information to tell if the change shifts the supply curve rightward, leftward, or not at all.
   E) It creates a movement downward along the supply curve.

   Answer: A

   Topic: Shifts of the supply curve
   Skill: Level 3: Using models
   Section: Checkpoint 4.2
   Status: Old
   AACSB: Analytical thinking
54) If the supply of iPods increases, then
   i. the supply curve for iPods has shifted rightward.
   ii. the price of iPods has decreased.
   iii. there will be a movement upward along the iPod supply curve.
   A) i only
   B) i, ii and iii
   C) i and ii
   D) ii and iii
   E) i and iii
   Answer: A
   Topic: Quantity supplied versus supply
   Skill: Level 3: Using models
   Section: Checkpoint 4.2
   Status: Old
   AACS: Analytical thinking

55) Which of the following leads to an increase in the quantity supplied but not an increase in supply?
   A) a decrease in the costs of production
   B) an increase in the product's price
   C) an advance in the technology used to produce the good
   D) an increase in the price of another product that the suppliers can produce
   E) an increase in the number of firms producing the good or service
   Answer: B
   Topic: Quantity supplied versus supply
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.2
   Status: Old
   AACS: Reflective thinking

56) The price of salsa rises. How does the increase in the price of salsa affect the supply of salsa?
   A) The supply of salsa increases.
   B) The supply of salsa decreases.
   C) There is no change to either the supply of salsa or the quantity of salsa supplied.
   D) There is no change to the supply of salsa, but the quantity of salsa supplied increases.
   E) There is no change to the supply of salsa, but the quantity of salsa supplied decreases.
   Answer: D
   Topic: Quantity supplied versus supply
   Skill: Level 3: Using models
   Section: Checkpoint 4.2
   Status: Old
   AACS: Reflective thinking
57) If a higher price for wheat decreases the quantity of corn being produced, which of the following describes what has occurred?
   A) The supply of wheat increased, and the supply of corn decreased.
   B) The quantity of wheat supplied increased, and quantity of corn supplied decreased.
   C) The supply of wheat increased, and the quantity of corn supplied decreased.
   D) The quantity of wheat supplied increased, and the supply of corn decreased.
   E) The supply of wheat decreased, and the supply of corn decreased.

   Answer: D
   Topic: Quantity supplied versus supply
   Skill: Level 4: Applying models
   Section: Checkpoint 4.2
   Status: Old
   AACSB: Reflective thinking

58) "Other things remaining the same, if the price of a good rises, the quantity supplied of that good increases." This sentence describes a
   A) shift of a supply curve.
   B) shift of the price curve.
   C) movement along a supply curve.
   D) movement along the price curve.
   E) movement along the quantity curve.

   Answer: C
   Topic: Movement along the supply curve
   Skill: Level 2: Using definitions
   Section: Checkpoint 4.2
   Status: Old
   AACSB: Reflective thinking

59) The quantity supplied of a good, service, or resource is ________ during a specified period and at a specified price.
   A) the amount that people are able to sell
   B) the amount that people are willing to sell
   C) the amount that people are able and willing to sell
   D) the amount that people are willing and able to buy
   E) the amount sold

   Answer: C
   Topic: Quantity supplied
   Skill: Level 1: Definition
   Section: Checkpoint 4.2
   Status: Old
   AACSB: Reflective thinking
60) The quantity supplied of a good is
   A) the same thing as the quantity demanded at each price.
   B) the amount that the people are willing and able to sell during a given time period at a specified price.
   C) equal to the difference between the quantity available and the quantity desired by all consumers and producers.
   D) the amount the firm will sell when it can sell all it wants.
   E) always larger than the quantity demanded at each price.

Answer: B

61) The graph illustrates the supply of sweaters. Which of the following events will increase the quantity supplied of sweaters?
   A) a rise in the price of a sweater
   B) a rise in the wage rate paid to the workers who make sweaters
   C) a rise in the expected future price of a sweater
   D) an increase in the number of sellers of sweaters
   E) a decrease in the number of sweater buyers

Answer: A
62) Which of the following indicates that the law of supply applies to makers of soda?
   A) An increase in the price of a soda leads to an increase in the demand for soda.
   B) An increase in the price of a soda leads to an increase in the supply of soda.
   C) An increase in the price of a soda leads to an increase in the quantity of soda supplied.
   D) A decrease in the price of a soda leads to an increase in the quantity of soda demanded.
   E) A decrease in the price of a soda leads to an increase in the supply of soda.

Answer: C

63) One reason supply curves have an upward slope is because
   A) increased supply will require increased technology.
   B) people will pay a higher price when less is supplied.
   C) a higher price brings a greater profit, so firms want to sell more of that good.
   D) to have more of the good supplied requires more firms to open.
   E) None of the above answers is correct because supply curves have a downward slope.

Answer: C

64) The market supply curve is the ______ of the ______.
   A) horizontal sum; individual supply curves
   B) vertical sum; individual supply curves
   C) horizontal sum; individual supply curves minus the market demand
   D) vertical sum; individual supply curves minus the market demand
   E) vertical average; individual supply curves

Answer: A

65) If the costs of producing pizza increase, which will occur?
   A) The supply of pizza will decrease.
   B) The quantity of pizzas supplied will increase as sellers try to cover their costs.
   C) Pizza will cease to be produced and sold.
   D) The demand curve for pizza will shift leftward when the price of a pizza increases.
   E) The demand curve for pizza will shift rightward when the price of a pizza increases.

Answer: A
66) A rise in the price of a substitute in production for a good leads to
   A) an increase in the supply of that good.
   B) a decrease in the supply of that good.
   C) no change in the supply of that good; instead there is a change in the quantity supplied.
   D) a decrease in the quantity of that good supplied.
   E) no change in either the supply or the quantity supplied of the good.
Answer: B

Topic: Changes in supply, price of a substitute in production
Skill: Level 2: Using definitions
Section: Checkpoint 4.2
Status: Old
AACSBE: Reflective thinking

67) Suppose the price of leather used to produce shoes increases. The higher price of leather
   _______ the supply of shoes, and the supply curve of shoes _______.
   A) increases; shifts rightward
   B) increases; shifts leftward
   C) decreases; shifts rightward
   D) decreases; shifts leftward
   E) does not change; does not shift
Answer: D

Topic: Changes in supply, price of a resource
Skill: Level 4: Applying models
Section: Checkpoint 4.2
Status: Old
AACSBE: Analytical thinking

68) An increase in the number of producers of bird seed _______ the supply of bird seed and
   shifts the supply curve of bird seed _______.
   A) increases; rightward
   B) increases; leftward
   C) decreases; rightward
   D) decreases; leftward
   E) does not change; rightward
Answer: A

Topic: Changes in supply, number of sellers
Skill: Level 2: Using definitions
Section: Checkpoint 4.2
Status: Old
AACSBE: Analytical thinking
69) The graph illustrates the supply of sweaters. Which of the following events will increase the supply of sweaters?

A) a rise in the price of a sweater  
B) a rise in the wage rate paid to the workers who make sweaters  
C) a rise in the expected future price of a sweater  
D) an increase in the number of sellers of sweaters  
E) an increase in income if sweaters are a normal good

Answer: D

Topic: Changes in supply, number of sellers  
Skill: Level 2: Using definitions  
Section: Checkpoint 4.2  
Status: Old  
AACSB: Analytical thinking

70) The graph illustrates the supply of sweaters. As the technology used to produce sweaters improves, the

A) supply of sweaters decreases, and the demand for sweaters does not change.  
B) supply of sweaters increases, and the demand for sweaters does not change.  
C) quantity of sweaters supplied increases.  
D) quantity of sweaters supplied decreases.  
E) supply of sweaters increases, and the demand for sweaters increases.

Answer: B

Topic: Changes in supply, productivity  
Skill: Level 2: Using definitions  
Section: Checkpoint 4.2  
Status: Old  
AACSB: Analytical thinking
71) An increase in the productivity of producing jeans results in
A) the quantity of jeans supplied increasing.
B) the supply of jeans increasing.
C) buyers demanding more jeans because they are now more efficiently produced.
D) buyers demanding fewer jeans because their price will fall, which signals lower quality.
E) some change, but the impact on the supply of jeans is impossible to predict.

Answer: B  
Topic: Changes in supply, productivity  
Skill: Level 2: Using definitions  
Section: Checkpoint 4.2  
Status: Old  
AACSBS: Reflective thinking

72) A change in the price of a good ________ its supply curve and ________ a movement along its supply curve.
A) shifts; causes
B) shifts; does not cause
C) does not shift; causes
D) does not shift; does not cause
E) None of the above because the change in the price might cause either a shift in the supply curve or a movement along the supply curve depending on the size of the change.

Answer: C  
Topic: Shifts of the supply curve versus movement along the supply curve  
Skill: Level 2: Using definitions  
Section: Checkpoint 4.2  
Status: Old  
AACSBS: Reflective thinking
73) The graph illustrates the supply of sweaters. A fall in the price of sweaters brings
A) a movement along the supply curve.
B) a decrease in the quantity supplied of sweaters.
C) a shift of the supply curve.
D) Both answers A and B are correct.
E) Both answers B and C are correct.

Answer: D

Topic: Movement along the supply curve
Skill: Level 2: Using definitions
Section: Checkpoint 4.2
Status: Old
AACSB: Analytical thinking
74) The graph illustrates the supply of soda. If the price of soda rises from $0.50 a can to $1.50 a can, the quantity of soda supplied
   A) increases from 0 cans to 4,000 cans a day.
   B) decreases from 4,000 cans to 0 cans a day.
   C) remains unchanged because the supply increases not the quantity supplied.
   D) increases from 0 to 6,000 cans a day.
   E) remains unchanged because the supply decreases not the quantity supplied.

Answer: A

Topic: Movement along the supply curve
Skill: Level 2: Using definitions
Section: Checkpoint 4.2
Status: Old
AACSB: Analytical thinking

4.3 Market Equilibrium

1) Market equilibrium occurs when
   A) all markets become equal.
   B) the quantity demanded equals the quantity supplied.
   C) opposing forces pull demand and supply apart.
   D) demand and supply move in opposite direction.
   E) demand and supply change so that they are equal at all possible prices.

Answer: B

Topic: Market equilibrium
Skill: Level 1: Definition
Section: Checkpoint 4.3
Status: Old
AACSB: Reflective thinking
2) Market equilibrium occurs when
   A) the quantity demanded equals the quantity supplied.
   B) the market is changing rapidly.
   C) other things remain the same.
   D) buyers get the lowest possible price.
   E) everyone who wants the good gets the quantity he or she wants.
Answer: A

3) Market equilibrium
   i. can never occur because there are always people who want a good but cannot afford it.
   ii. occurs at the intersection of the supply and demand curves.
   iii. is the point where the price equals the quantity.
       A) ii only   B) iii only   C) ii and iii   D) i only   E) i and ii
Answer: A

4) A surplus of cardboard boxes means that
   A) at the current price of a cardboard box, the quantity demanded exceeds the quantity supplied.
   B) at the current price of a cardboard box, the quantity demanded is less than the quantity supplied.
   C) the current price of a cardboard box is less than the equilibrium price.
   D) at the current price of a cardboard box, the quantity demanded equals the quantity supplied and the price will fall to restore the equilibrium.
   E) More information is needed to determine if the price of cardboard boxes is higher than, lower than, or equal to the equilibrium price.
Answer: B
5) When there is a surplus of snowboards, the
   A) demand for snowboards is greater than the supply of snowboards.
   B) supply of snowboards is greater than the demand for snowboards.
   C) quantity of snowboards demanded is greater than the quantity of snowboards supplied.
   D) quantity of snowboards supplied is greater than the quantity of snowboards demanded.
   E) price rises to restore the equilibrium.
Answer: D

Topic: Surplus
Skill: Level 1: Definition
Section: Checkpoint 4.3
Status: Old
AACSB: Reflective thinking

6) If there is a surplus of tacos, then the
   A) quantity of tacos demanded equals the quantity of tacos supplied.
   B) quantity of tacos demanded is greater than the quantity of tacos supplied.
   C) quantity of tacos demanded is less than the quantity of tacos supplied.
   D) market is at equilibrium.
   E) supply curve of tacos will shift leftward to eliminate the surplus.
Answer: C

Topic: Surplus
Skill: Level 2: Using definitions
Section: Checkpoint 4.3
Status: Old
AACSB: Reflective thinking

7) When a surplus of rice occurs,
   A) the price of rice rises.
   B) the price of rice falls.
   C) there is a balance between the forces of supply and demand.
   D) the quantity demanded is greater than quantity supplied at the current price.
   E) the demand curve shifts rightward and the supply curve shifts leftward to eliminate the surplus.
Answer: B

Topic: Surplus
Skill: Level 2: Using definitions
Section: Checkpoint 4.3
Status: Old
AACSB: Reflective thinking
8) Suppose the equilibrium price of oranges is $2.00 per pound. If the actual price is above the equilibrium price a
   A) shortage exists, and the price falls to restore equilibrium.
   B) shortage exists, and the price rises to restore equilibrium.
   C) surplus exists, and the price falls to restore equilibrium.
   D) surplus exists, and the price rises to restore equilibrium.
   E) surplus exists, but nothing happens until either the demand or the supply changes.

   Answer: C

   Topic: Surplus
   Skill: Level 3: Using models
   Section: Checkpoint 4.3
   Status: Old
   AACSBB: Reflective thinking

9) Suppose the current price of a pound of steak is $12 per pound and the equilibrium price is $9 per pound. In this case, there is a
   A) shortage, so the price falls and quantity demanded increases.
   B) surplus, so the price falls and quantity demanded increases.
   C) shortage, so the price rises and quantity demanded decreases.
   D) surplus, so the price rises and quantity demanded increases.
   E) surplus, so the price falls and quantity supplied increases.

   Answer: B

   Topic: Surplus
   Skill: Level 3: Using models
   Section: Checkpoint 4.3
   Status: Old
   AACSBB: Reflective thinking

10) As a falling price eliminates a surplus in the jersey market,
    A) the demand curve for jerseys shifts leftward, and the supply curve of jerseys shifts rightward.
    B) consumers increase the quantity of jerseys they demand.
    C) producers increase the quantity of jerseys they supply.
    D) producers decrease the quantity of jerseys they supply, and buyers decrease the quantity of jerseys they demand.
    E) the demand curve for jerseys shifts rightward, and the supply curve of jerseys shifts leftward.

   Answer: B

   Topic: Surplus
   Skill: Level 5: Critical thinking
   Section: Checkpoint 4.3
   Status: Old
   AACSBB: Reflective thinking
11) If the price is below the equilibrium price,
   A) there is a surplus.
   B) there is a shortage.
   C) the supply curve will shift rightward.
   D) the supply curve will shift leftward.
   E) the demand curve will shift leftward.
Answer: B

12) When there is a shortage of parking spaces at your college, the
   A) demand for parking spaces is greater than the supply.
   B) supply of parking spaces is greater than the demand.
   C) quantity of parking spaces supplied is greater than the quantity of parking spaces demanded.
   D) quantity of parking spaces demanded is greater than the quantity of parking spaces supplied.
   E) Both answers A and D are correct.
Answer: D

13) If the price of carrots is below the equilibrium price, the
   A) quantity demanded of carrots exceeds the quantity supplied, and a surplus exists.
   B) quantity supplied of carrots exceeds the quantity demanded, and a surplus exists.
   C) quantity demanded of carrots exceeds the quantity supplied, and a shortage exists.
   D) quantity supplied of carrots exceeds the quantity demanded, and a shortage exists.
   E) quantity supplied of carrots equals the quantity demanded.
Answer: C
14) Suppose the current price of a pound of steak is $6 per pound and the equilibrium price is $9 per pound. What takes place?
   A) There is a shortage, so the price falls and quantity demanded increases.
   B) There is a surplus, so the price falls and quantity demanded increases.
   C) There is a shortage, so the price rises and quantity demanded decreases.
   D) There is a shortage, so the price rises and quantity demanded increases.
   E) There is a shortage, so the price falls and quantity demanded decreases.

Answer: C

Topic: Shortage
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSBS: Reflective thinking

<table>
<thead>
<tr>
<th>Price (dollars per gallon)</th>
<th>Quantity demanded (gallons of gasoline)</th>
<th>Quantity supplied (gallons of gasoline)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.73</td>
<td>337,982</td>
<td>441,074</td>
</tr>
<tr>
<td>3.68</td>
<td>396,398</td>
<td>428,008</td>
</tr>
<tr>
<td>3.65</td>
<td>412,031</td>
<td>412,031</td>
</tr>
<tr>
<td>3.62</td>
<td>417,899</td>
<td>391,665</td>
</tr>
</tbody>
</table>

15) The table above shows the situation in the gasoline market in Tulsa, Oklahoma. If the price of a gallon of gasoline is $3.65, then
   A) there is a surplus of gasoline in Tulsa.
   B) there is a shortage of gasoline in Tulsa.
   C) the gasoline market in Tulsa is in equilibrium.
   D) without more information we cannot determine if there is a surplus, a shortage, or an equilibrium in the gasoline market in Tulsa.
   E) there is neither a surplus nor a shortage but the market is NOT in equilibrium.

Answer: C

Topic: Market equilibrium
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSBS: Analytical thinking

16) The table above shows the situation in the gasoline market in Tulsa, Oklahoma. If the price of a gallon of gasoline is $3.73, then
   A) there is a surplus of gasoline in Tulsa.
   B) there is a shortage of gasoline in Tulsa.
   C) the gasoline market in Tulsa is in equilibrium.
   D) without more information we cannot determine if there is a surplus, a shortage, or an equilibrium in the gasoline market in Tulsa.
   E) there is neither a surplus nor a shortage, but the market is NOT in equilibrium.

Answer: A

Topic: Surplus
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSBS: Analytical thinking
17) The table above shows the situation in the gasoline market in Tulsa, Oklahoma. If the price of a gallon of gasoline is $3.62, then
   A) there is a surplus of gasoline in Tulsa.
   B) there is a shortage of gasoline in Tulsa.
   C) the gasoline market in Tulsa is in equilibrium.
   D) without more information we cannot determine if there is a surplus, a shortage, or an equilibrium in the gasoline market in Tulsa.
   E) there is neither a surplus nor a shortage, but the market is NOT in equilibrium.

Answer: B

Topic: Shortage
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

<table>
<thead>
<tr>
<th>Price (dollars per cellular phone)</th>
<th>Quantity demanded (thousands)</th>
<th>Quantity supplied (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>80</td>
<td>55</td>
<td>80</td>
</tr>
<tr>
<td>50</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>20</td>
<td>100</td>
<td>40</td>
</tr>
</tbody>
</table>

18) Using the data in the table above, the equilibrium quantity and equilibrium price for a cellular telephone are
   A) 50,000 and $100.
   B) 80,000 and $80.
   C) 60,000 and $50.
   D) 40,000 and $20.
   E) 100,000 and $20.

Answer: C

Topic: Market equilibrium
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

19) Using the data in the table above, at the price of $80 a phone,
   A) a shortage of 25,000 cellular telephones occurs.
   B) a surplus of 80,000 cellular telephones occurs.
   C) a surplus of 25,000 cellular telephones occurs.
   D) a shortage of 55,000 cellular telephones occurs.
   E) the market is in equilibrium.

Answer: C

Topic: Surplus
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
<table>
<thead>
<tr>
<th>Price (dollars per stapler)</th>
<th>Quantity demanded (thousands of staplers per week)</th>
<th>Quantity supplied (thousands of staplers per week)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>7</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>6</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>5</td>
<td>100</td>
<td>60</td>
</tr>
</tbody>
</table>

20) Using the data in the table above, the equilibrium quantity and equilibrium price for a stapler is
   A) 10,000 and $8.
   B) 90,000 and $8.
   C) 100,000 and $5.
   D) 70,000 and $6.
   E) 60,000 and $5.
Answer: D

21) Using the data in the table above, if the price of a stapler is $8, then there is _______ of staplers, and the quantity of staplers demanded _______ the quantity of staplers supplied.
   A) a surplus; is greater than
   B) a surplus; is less than
   C) a shortage; is greater than
   D) a shortage; is less than
   E) neither a surplus nor a shortage; equals
Answer: B

22) Using the data in the table above, if the price of a stapler is $5, then there is _______ of staplers, and the quantity of staplers demanded _______ the quantity of staplers supplied.
   A) a surplus; is greater than
   B) a surplus; is less than
   C) a shortage; is greater than
   D) a shortage; is less than
   E) neither a surplus nor a shortage; equals
Answer: C
23) In the figure above, a price of $35 per dozen roses results in
   A) a shortage.
   B) equilibrium.
   C) a surplus.
   D) upward pressure on the price of roses.
   E) an eventual rightward shift of the demand curve and/or leftward shift of the supply curve.
Answer: C
Topic: Surplus
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

24) In the figure above, a price of $15 per dozen roses results in
   A) equilibrium.
   B) a shortage.
   C) a surplus.
   D) downward pressure on the price of roses.
   E) an eventual leftward shift of the demand curve and/or rightward shift of the supply curve.
Answer: B
Topic: Shortage
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
25) The above figure shows the market for game day t-shirts. If the price of t-shirts is $8, then
   A) there is a shortage and the price of t-shirts will rise.
   B) there is a surplus and the price of t-shirts will rise.
   C) the market is in equilibrium.
   D) there is a shortage and the price of t-shirts will fall.
   E) there is a surplus and the price of t-shirts will fall.

   Answer: A

   Topic: Surplus, shortage, market equilibrium
   Skill: Level 3: Using models
   Section: Checkpoint 4.3
   Status: Old
   AACSB: Analytical thinking

26) The above figure shows the market for game day t-shirts. If the price of t-shirts is $10, then
   A) there is a surplus and the price of t-shirts will rise.
   B) there is a shortage and the price of t-shirts will rise.
   C) there is a shortage and the price of t-shirts will fall.
   D) there is a surplus and the price of t-shirts will fall.
   E) the market is in equilibrium.

   Answer: E

   Topic: Surplus, shortage, market equilibrium
   Skill: Level 3: Using models
   Section: Checkpoint 4.3
   Status: Old
   AACSB: Analytical thinking
27) The above figure shows the market for game day t-shirts. If the price of t-shirts is $12, then
   A) there is a shortage and the price of t-shirts will fall.
   B) there is a shortage and the price of t-shirts will rise.
   C) there is a surplus and the price of t-shirts will rise.
   D) there is a surplus and the price of t-shirts will fall.
   E) the market is in equilibrium.
Answer: D
Topic: Surplus, shortage, market equilibrium
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

28) The above figure shows the market for game day t-shirts. If the price of t-shirts is $8, then
   A) the market is in equilibrium.
   B) there is a surplus and the price of t-shirts will rise.
   C) the quantity demanded is greater than quantity supplied.
   D) there is a shortage and the price of t-shirts will fall.
   E) there is a surplus and the price of t-shirts will fall.
Answer: C
Topic: Surplus, shortage, market equilibrium
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

29) Assume a competitive market is in equilibrium. There is an increase in demand, but no change in supply. As a result, the equilibrium price _______, and the equilibrium quantity _______.
   A) rises; increases
   B) rises; does not change
   C) falls; does not change
   D) falls; decreases
   E) falls; increases
Answer: A
Topic: Effects of an increase in demand
Skill: Level 2: Using definitions
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
30) If a market begins in equilibrium and then the demand curve shifts leftward, a
    A) shortage is created, which is eliminated by a fall in price.
    B) shortage is created, which is eliminated by a rise in price.
    C) surplus is created, which is eliminated by a fall in price.
    D) surplus is created, which is eliminated by a rise in price.
    E) surplus is created, which is eliminated by the supply curve shifting leftward.
    Answer: C

31) When the demand curve shifts rightward and the market moves to a new equilibrium, then the
    A) supply increases.
    B) supply decreases.
    C) quantity supplied increases.
    D) quantity supplied decreases.
    E) price falls to restore the equilibrium.
    Answer: C

32) Suppose the equilibrium quantity of movie tickets is 1000. If the demand curve shifts ________,
    the equilibrium quantity of movie tickets will ________.
    A) rightward; increase
    B) rightward; decrease
    C) leftward; increase
    D) rightward; not change
    E) leftward; not change
    Answer: A
33) If consumers buy a large number of plug-in electric cars, the equilibrium price of electricity will _______ and the equilibrium quantity of electricity will _______.

A) rise; increase
B) rise; decrease
C) fall; increase
D) fall; decrease
E) not change; increase

Answer: A

Topic: Effects of an increase in demand
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

34) Because of a sharp increase in the price of gasoline, the demand for Sports Utility vehicles (SUVs) has decreased. So, the high price of gasoline leads to a

A) leftward shift of the demand curve for SUVs and the supply curve of SUVs.
B) leftward shift of the demand curve for SUVs and no shift in the supply curve of SUVs.
C) leftward shift of the demand curve for SUVs and a rightward shift of the supply curve of SUVs.
D) leftward shift of the supply curve of SUVs and no shift in the demand curve for SUVs.
E) rightward shift of the supply curve of SUVs and no shift in the demand curve for SUVs.

Answer: B

Topic: Effects of an increase in demand
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

35) If the price of tangerines increases, the price of oranges also rises because

A) consumers consider the two goods complements, and so sellers decreased the supply of oranges.
B) consumers consider the two goods substitutes, and demand for oranges increases.
C) if the supply of tangerines decreased, then the supply of oranges also must decrease.
D) buyers must have expected a higher price for oranges and thus increased their demand for oranges.
E) buyers’ incomes must have decreased, and oranges are an inferior good.

Answer: B

Topic: Effects of an increase in demand
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
36) Suppose that the equilibrium price and quantity of new houses both increase. Which of the following could be a cause of this change?

A) Both the supply and the demand for new houses increased, and the supply increased by more than the demand.
B) The demand for new houses increased, and the supply did not change.
C) Both the supply and demand for new houses decreased.
D) The supply of new houses decreased, and the demand for new houses did not change.
E) The supply of new houses increased, and the demand for new houses did not change.

Answer: B

37) Suppose that the equilibrium price and quantity of new houses both increase. Which of the following could be a cause of this change?

A) The wage paid carpenters who build new houses might have risen.
B) A technological advance in framing a new house might have occurred.
C) The rent for nearby apartments might have fallen.
D) More home buyers might have moved into the area.
E) The cost of wood framing used to build houses might have fallen.

Answer: D

38) Suppose that over the next few years, the demand for dancing to country and western music decreases. Hence, at country and western dance clubs, the equilibrium price of admission _______ , and the equilibrium quantity of dancing _______.

A) rises; increases
B) rises; decreases
C) falls; increases
D) falls; decreases
E) does not change; decreases

Answer: D
39) For consumers, taco chips and salsa are complements. If the price of salsa rises, what is the effect on the equilibrium price and quantity of taco chips?
- A) The equilibrium price of taco chips falls, and the equilibrium quantity decreases.
- B) The equilibrium price of taco chips rises, and the equilibrium quantity decreases.
- C) There is no change in the equilibrium price of taco chips, and the equilibrium quantity increases.
- D) The equilibrium price of taco chips could rise, fall, or stay the same, and the equilibrium quantity increases.
- E) The equilibrium price of taco chips rises, and the equilibrium quantity increases.

Answer: A

Topic: Effects of a decrease in demand
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

40) Computer chips are a normal good. Suppose the economy slips into a recession so that income falls. As a result, the demand for computer chips _______ so that the price of a computer chip _______.
- A) increases; rises
- B) increases; falls
- C) decreases; rises
- D) decreases; falls
- E) decreases; does not change

Answer: D

Topic: Effects of a decrease in demand
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

41) Bagels and cream cheese are complementary goods. Suppose that the price for flour, which is used to produce bagels, increases. The equilibrium price of cream cheese _______, and the equilibrium quantity of cream cheese _______.
- A) rises; decreases
- B) rises; increases
- C) falls; decreases
- D) does not change; does not change
- E) falls; increases

Answer: C

Topic: Effects of a decrease in demand
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
42) Suppose that people decide riding scooters is no longer fun. The equilibrium price of a scooter ________, and the equilibrium quantity of scooters ________.

A) rises; increases
B) rises; decreases
C) falls; increases
D) falls; decreases
E) does not change; decreases

Answer: D

Topic: Effects of a decrease in demand
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSBS: Analytical thinking

43) Assume a market is in equilibrium. There is an increase in supply, but no change in demand. As a result, the equilibrium price ________, and the equilibrium quantity ________.

A) rises; increases
B) rises; decreases
C) rises; does not change
D) falls; decreases
E) falls; increases

Answer: E

Topic: Effects of an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSBS: Analytical thinking

44) If good weather conditions result in a larger than normal crop of peaches, then the

A) equilibrium price of peaches rises, and the equilibrium quantity of peaches increases.
B) equilibrium price of peaches falls, and the equilibrium quantity of peaches increases.
C) demand curve for peaches shifts leftward.
D) increase in the supply of peaches induces a greater demand for peaches, so that the equilibrium price rises and the equilibrium quantity increases.
E) equilibrium price of peaches falls, and the equilibrium quantity of peaches decreases.

Answer: B

Topic: Effects of an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSBS: Analytical thinking
45) The initial equilibrium price in the market for Web pages is $200 per page and 1000 Web pages are created in a month. Many new Web design firms now enter the market. As a result,
A) the supply of Web pages increases and the price falls.
B) the supply curve of Web pages shifts leftward and the price falls.
C) the demand for Web pages increases and the price rises.
D) the supply of Web pages increase and the price falls, which then increases the demand for Web pages and the demand curve shifts rightward.
E) the demand for Web pages increases and the price falls.

Answer: A
Topic: Effects of an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACS B: Analytical thinking

46) Suppose the equilibrium price of movie tickets is $10. If the supply curve for movies shifts ________, the equilibrium price will ________.
A) rightward; decrease
B) leftward; decrease
C) rightward; increase
D) leftward; not change
E) rightward; not change

Answer: A
Topic: Effects of an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACS B: Analytical thinking

47) Which of the following lowers the equilibrium price of a canoe?
A) an increase in the supply of canoes
B) an increase in the demand for canoes
C) an increase in the quantity of canoes supplied
D) a decrease in the supply of canoes
E) Both answers A and B are correct.

Answer: A
Topic: Effects of an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACS B: Reflective thinking
48) When personal computers were first produced, the price was very high. As time passed, the price of personal computers fell because
   A) the demand for personal computers decreased.
   B) the initial price was too high and nobody bought personal computers.
   C) there were technological advances in the production of personal computers.
   D) people’s incomes increased and personal computers are an inferior good.
   E) None of the above answers is correct.

Answer: C

Topic: Effects of an increase in supply
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSBl: Analytical thinking

49) If a freeze destroys oranges before they are harvested, the equilibrium price of an orange ________, and the equilibrium quantity ________.
   A) rises; increases
   B) rises; decreases
   C) falls; increases
   D) falls; decreases
   E) does not change; decreases

Answer: B

Topic: Effects of a decrease in supply
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSBl: Analytical thinking

50) Suppose that the price of bread rises. This rise could be the result of
   A) a decrease in the supply of bread.
   B) an increase in the supply of bread.
   C) a decrease in the demand for bread.
   D) Both answers A and C are correct.
   E) Both answers B and C are correct.

Answer: A

Topic: Effects of a decrease in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSBl: Analytical thinking
51) If an early frost destroys most of the apple crop, the equilibrium price of an apple _______ and the equilibrium quantity _______.
   A) rises; increases
   B) rises; decreases
   C) falls; increases
   D) falls; decreases
   E) does not change; decreases

Answer: B

Topic: Effects of a decrease in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

52) In Great Britain, raising taxes on gasoline has increased the costs of supplying gasoline. As a result, the equilibrium quantity of gasoline _______ and the equilibrium price of gasoline _______.
   A) increases; rises
   B) increases; falls
   C) decreases; rises
   D) decreases; falls
   E) does not change; rises

Answer: C

Topic: Effects of a decrease in supply
Skill: Level 2: Using definitions
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

53) Suppose that the price of flour used to produce bagels increases. Hence the equilibrium price of a bagel _______ and the equilibrium quantity _______.
   A) rises; increases
   B) rises; decreases
   C) falls; increases
   D) falls; decreases
   E) does not change; does not change

Answer: B

Topic: Effects of a decrease in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
54) Fresh orange juice and frozen orange juice are substitutes in production. The price of fresh orange juice rises. As a result, the equilibrium price of frozen orange juice _______ and the equilibrium quantity _______.
   A) rises; increases
   B) rises; decreases
   C) falls; increases
   D) falls; decreases
   E) does not change; decreases

Answer: B

Topic: Effects of a decrease in supply
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSBS: Analytical thinking
55) A construction boom occurs and many of the new buildings need plywood for their framing. Which of the figures above best illustrates this change?

A) Figure A  
B) Figure B  
C) Figure C  
D) Figure D  
E) Figure A or Figure C  

Answer: A

Topic: Effects of an increase in demand  
Skill: Level 3: Using models  
Section: Checkpoint 4.3  
Status: Old  
AAGSB: Analytical thinking
56) Contractors can use plywood or brick to construct walls. Suppose the price of bricks increases. Which of the figures above best illustrates the effect of this change on the market for plywood?

A) Figure A  
B) Figure B  
C) Figure C  
D) Figure D  
E) Figure A or Figure C depending on how contractors react to the higher price of bricks.

Answer: A  
Topic: Effects of an increase in demand  
Skill: Level 3: Using models  
Section: Checkpoint 4.3  
Status: Old  
AACS: Analytical thinking

57) The number of logging firms increases. Which of the figures above best illustrates this change?

A) Figure A  
B) Figure B  
C) Figure C  
D) Figure D  
E) Figure A and Figure D

Answer: D  
Topic: Effects of an increase in supply  
Skill: Level 3: Using models  
Section: Checkpoint 4.3  
Status: Old  
AACS: Analytical thinking

58) New technology for producing plywood is developed. Which of the figures above best illustrates this change?

A) Figure A  
B) Figure B  
C) Figure C  
D) Figure D  
E) Figure A and Figure D

Answer: D  
Topic: Effects of an increase in supply  
Skill: Level 3: Using models  
Section: Checkpoint 4.3  
Status: Old  
AACS: Analytical thinking
59) In an effort to protect endangered species from the effects of logging in America’s national forests, the federal government passes a law prohibiting logging in most of the state of Washington. Which of the figures above best illustrates the effect of this new law?

A) Figure A
B) Figure B
C) Figure C
D) Figure D
E) None of the above because a prohibition cannot be illustrated using demand and supply figures.

Answer: C

Topic: Effects of a decrease in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSBE: Analytical thinking
60) Which figure above shows the effect if research is published claiming that eating pizza is healthy?
   A) Figure A
   B) Figure B
   C) Figure C
   D) Figure D
   E) Both Figure A and Figure D

Answer: A

Topic: Effects of an increase in demand
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
61) Pizza is a normal good. Which figure above shows the effect of a decrease in consumers’ incomes?
   A) Figure A  
   B) Figure B  
   C) Figure C  
   D) Figure D  
   E) Both Figure B and Figure C

Answer: B

Topic: Effects of a decrease in demand  
Skill: Level 4: Applying models  
Section: Checkpoint 4.3  
Status: Old  
AACS: Analytical thinking

62) Which figure above shows the effect of a technological advance in the production of pizza?
   A) Figure A  
   B) Figure B  
   C) Figure C  
   D) Figure D  
   E) Both Figure A and Figure D

Answer: D

Topic: Effects of an increase in supply  
Skill: Level 4: Applying models  
Section: Checkpoint 4.3  
Status: Old  
AACS: Analytical thinking

63) Which figure above shows the effect of a decrease in the number of pizza sellers?
   A) Figure A  
   B) Figure B  
   C) Figure C  
   D) Figure D  
   E) Both Figure B and Figure C

Answer: C

Topic: Effects of a decrease in supply  
Skill: Level 4: Applying models  
Section: Checkpoint 4.3  
Status: Old  
AACS: Analytical thinking
64) Which figure above shows the effect of an increase in the cost of the tomato sauce used to produce pizza?
A) Figure A
B) Figure B
C) Figure C
D) Figure D
E) Both Figure B and Figure C
Answer: C

65) The above figure shows the market for pizza. The market is in equilibrium when people’s incomes decrease. If pizza is a normal good, then which point represents the most likely new price and quantity?
A) A
B) B
C) C
D) D
E) E
Answer: E
66) The above figure shows the market for pizza. The market is in equilibrium when the cheese used to produce pizza falls in price. What point represents the most likely new price and quantity?

A) A  B) B  C) C  D) D  E) E

Answer: D

Topic: Effects of an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

67) The above figure shows the market for pizza. The market is in equilibrium when the wages paid pizza workers increases. What point represents the most likely new price and quantity?

A) A  B) B  C) C  D) D  E) E

Answer: B

Topic: Effects of a decrease in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

68) The above figure shows the market for pizza. The market is in equilibrium when new pizza firms enter the market. What point represents the most likely new price and quantity?

A) A  B) B  C) C  D) D  E) E

Answer: D

Topic: Effects of an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

69) The above figure shows the market for pizza. The market is in equilibrium when some of the pizza firms go out of business. What point represents the most likely new price and quantity?

A) A  B) B  C) C  D) D  E) E

Answer: B

Topic: Effects of a decrease in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

70) The above figure shows the market for pizza. The market is in equilibrium when people learn that eating pizza helps prevent heart disease. What point represents the most likely new price and quantity?

A) A  B) B  C) C  D) D  E) E

Answer: C

Topic: Effects of an increase in demand
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
71) The above figure shows the market for pizza. The market is in equilibrium. Pizza and tacos are substitutes for consumers. The price of tacos falls. What point represents the most likely new price and quantity?

A) A  B) B  C) C  D) D  E) E

Answer: E

Topic: Effects of a decrease in demand
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSBE: Analytical thinking

72) If both the supply and demand curves shift simultaneously, we can _always_ predict what will happen to

A) both the price and the quantity.
B) either the price or the quantity, but not both.
C) only the price.
D) only the quantity.
E) neither the price nor the quantity.

Answer: B

Topic: Effects of changes in both demand and supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSBE: Analytical thinking

73) A competitive market is in equilibrium. Then there is an increase in demand and an increase in supply. The equilibrium price ________, and the equilibrium quantity ________.

A) rises; increases
B) perhaps changes but we can’t say if it rises, falls, or stays the same; does not change
C) falls; increases
D) perhaps changes but we can’t say if it rises, falls, or stays the same; increases
E) falls; perhaps changes but we can’t say if it increases, decreases, or stays the same

Answer: D

Topic: Effects of an increase in demand and an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSBE: Analytical thinking
74) If the demand and supply both increase equally, then the equilibrium price ________, and the equilibrium quantity ________.
   A) increases; increases  
   B) increases; does not change  
   C) does not change; increases  
   D) increases; decreases  
   E) decreases; does not change  
   Answer: C

Topic: Effects of an increase in demand and an increase in supply  
Skill: Level 3: Using models  
Section: Checkpoint 4.3  
Status: Old  
AACSB: Analytical thinking

75) Kiwis and strawberries are substitutes for consumers. An increase in the price of a kiwi coupled with an increase in the number of strawberry growers ________ the equilibrium price of a pound of strawberries and ________ the equilibrium quantity of strawberries.
   A) raises; increases  
   B) probably changes, but more information is needed to determine if it rises or falls; increases  
   C) raises; probably changes, but more information is needed to determine if it increases or decreases  
   D) lowers; probably changes, but more information is needed to determine if it increases or decreases  
   E) lowers; increases  
   Answer: B

Topic: Effects of an increase in demand and an increase in supply  
Skill: Level 3: Using models  
Section: Checkpoint 4.3  
Status: Old  
AACSB: Analytical thinking

76) A competitive market is in equilibrium. Then there is a decrease in demand and a decrease in supply. The equilibrium price ________, and the equilibrium quantity ________.
   A) rises; decreases  
   B) perhaps changes but we can’t say if it rises, falls, or stays the same; decreases  
   C) falls; increases  
   D) perhaps changes but we can’t say if it rises, falls, or stays the same; increases  
   E) rises; increases  
   Answer: B

Topic: Effects of a decrease in demand and a decrease in supply  
Skill: Level 3: Using models  
Section: Checkpoint 4.3  
Status: Old  
AACSB: Analytical thinking
77) If both supply and demand decrease by the same amount, the equilibrium price
   A) does not change.
   B) rises.
   C) falls.
   D) cannot be predicted.
   E) None of the answers is correct because the price depends on what happens to the
   equilibrium quantity.
Answer: A

Topic: Effects of a decrease in demand and a decrease in supply
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSb: Analytical thinking

78) Both the demand for and supply of cars changes in France. You observe that the quantity of
cars does not change but the price rises. Thus, which of the following occurred?
   A) Demand and supply increased by an equal amount.
   B) Demand and supply decreased by an equal amount.
   C) Demand increased and supply decreased by an equal amount.
   D) Demand decreased and supply increased by an equal amount.
   E) Demand increased by a larger magnitude than supply decreased.
Answer: C

Topic: Effects of an increase in demand and a decrease in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSb: Analytical thinking

79) Suppose chickens and beef cattle are produced by different companies on different sites. If
bad weather causes an increase in the price of hay, a food eaten by beef cattle but not by
chickens, the equilibrium price of beef will ________, and the equilibrium price of chicken will
________.
   A) decrease; decrease
   B) decrease; increase
   C) stay the same; increase
   D) increase; increase
   E) increase; decrease
Answer: D

Topic: Effects of an increase in demand and a decrease in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: New
AACSb: Analytical thinking
80) What happens to the equilibrium price and quantity of automobile tires if rubber prices increase and the price of automobiles falls?
   A) The equilibrium price and quantity decrease.
   B) The equilibrium price falls, but the change in equilibrium quantity is unknown.
   C) The equilibrium price and quantity increase.
   D) The equilibrium quantity decreases, but the change in equilibrium price is unknown.
   E) The equilibrium price rises, but the change in equilibrium quantity is unknown.

   Answer: E

   Topic: Effects of an increase in demand and a decrease in supply
   Skill: Level 3: Using models
   Section: Checkpoint 4.3
   Status: New
   AACSB: Analytical thinking

81) Suppose that the demand curve for desktop computers shifts rightward and at the same time the supply curve shifts leftward. Which of the following could have caused these shifts?
   A) Desktop computers are a normal good and incomes increased, while more firms entered the market.
   B) The price of a laptop computer, a substitute for desktop computers, fell and the cost of producing desktop computers decreased.
   C) Consumers purchased more computers because of the Christmas season and the labor costs of producing desktop computers decreased.
   D) Desktop computers are a normal good and incomes increased, while the labor costs of producing personal computers increased.
   E) Desktop computers are a normal good and incomes decreased, while the labor costs of producing personal computers increased.

   Answer: D

   Topic: Effects of an increase in demand and a decrease in supply
   Skill: Level 4: Applying models
   Section: Checkpoint 4.3
   Status: Old
   AACSB: Analytical thinking

82) If the demand curve for desktop computers shifts rightward and at the same time the supply curve shifts leftward, then
   A) the equilibrium price definitely rises.
   B) the equilibrium price definitely falls.
   C) the equilibrium price definitely remains the same.
   D) More information is needed to determine the effect on the equilibrium price.
   E) the equilibrium quantity definitely increases.

   Answer: A

   Topic: Effects of an increase in demand and a decrease in supply
   Skill: Level 4: Applying models
   Section: Checkpoint 4.3
   Status: Old
   AACSB: Analytical thinking
83) If the demand curve for desktop computers shifts rightward and at the same time the supply curve shifts leftward, then
   A) the equilibrium quantity definitely increases.
   B) the equilibrium quantity definitely decreases.
   C) the equilibrium quantity definitely remains the same.
   D) More information is needed to determine the effect on the equilibrium quantity.
   E) the equilibrium price definitely falls.

Answer: D

Topic: Effects of an increase in demand and a decrease in supply
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSBS: Analytical thinking

84) The demand for oranges increases while the supply decreases. The equilibrium price of oranges ________, and the equilibrium quantity ________.
   A) rises; decreases
   B) falls; perhaps changes but we can't say if it increases, decreases, or stays the same
   C) falls; increases
   D) does not change; perhaps changes but we can't say if it increases, decreases, or stays the same
   E) rises; perhaps changes but we can't say if it increases, decreases, or stays the same

Answer: E

Topic: Effects of an increase in demand and a decrease in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSBS: Analytical thinking

85) The demand for cat food decreases while the supply increases. The equilibrium price of cat food ________, and the equilibrium quantity ________.
   A) does not change; increases
   B) rises; decreases
   C) falls; perhaps changes but we can't say if it increases, decreases, or stays the same
   D) rises; perhaps changes but we can't say if it increases, decreases, or stays the same
   E) falls; increases

Answer: C

Topic: Effects of a decrease in demand and an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSBS: Analytical thinking
86) Suppose the government imposes a small carbon tax on automakers. But the price of gasoline has doubled due to a Middle East crisis which has reduced oil production. In the market for autos, these changes mean that supply and demand have both changed with the effect on the demand larger than the effect on the supply. The result is that the price of autos will _______ and the number of autos sold will _______.
   A) rise; perhaps change but we can’t say if it increases, decreases, or stays the same
   B) rise; increase
   C) rise; decrease
   D) fall; perhaps change but we can’t say if it increases, decreases, or stays the same
   E) fall; decrease

Answer: E
Topic: Effects of a decrease in demand and a decrease in supply
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

87) If both producers and consumers believe that a product’s price will rise in the future, then at the present, demand _______ and supply _______.
   A) increases; increases
   B) decreases; decreases
   C) increases; decreases
   D) decreases; increases
   E) does not change; does not change

Answer: C
Topic: Changes in both demand and supply, expected future price
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

88) If both producers and consumers believe that a product’s price will rise in the future, then at the present, the equilibrium price
   A) does not change.
   B) rises.
   C) falls.
   D) might rise, fall, or not change, but the change can never be predicted.
   E) might rise, fall, or not change depending on whether the effect from the producers is greater than or less than the effect from the consumers.

Answer: B
Topic: Changes in both demand and supply, expected future price
Skill: Level 4: Applying models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
89) The equilibrium price of a good occurs if the
   A) quantity of the good demanded equals the quantity of the good supplied.
   B) quantity of the good demanded is greater than the quantity of the good supplied.
   C) quantity of the good demanded is less than the quantity of the good supplied.
   D) demand for the good is equal to the supply of the good.
   E) price of the good seems reasonable to most buyers.

Answer: A

Topic: Market equilibrium
Skill: Level 1: Definition
Section: Checkpoint 4.3
Status: Old
AACSB: Reflective thinking

90) If there is a surplus of a good, the quantity demanded is ________ the quantity supplied and the price will ________.
   A) less than; rise
   B) less than; fall
   C) greater than; rise
   D) greater than; fall
   E) equal to; fall

Answer: B

Topic: Surplus
Skill: Level 2: Using definitions
Section: Checkpoint 4.3
Status: Old
AACSB: Reflective thinking
91) The graph illustrates the market for bottled water. When the price exceeds the equilibrium price, the quantity demanded is ______ the quantity supplied and the price of the good will ______.

A) less than; fall
B) greater than; rise
C) greater than; fall
D) less than; rise
E) equal to; fall

Answer: A

Topic: Surplus
Skill: Level 2: Using definitions
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

92) Which of the following is correct?
i. A surplus puts downward pressure on the price of a good.
ii. A shortage puts upward pressure on the price of a good.
iii. There is no surplus or shortage at equilibrium.

A) i and ii
B) i and iii
C) ii and iii
D) i, ii, and iii
E) only iii

Answer: D

Topic: Surplus, shortage, market equilibrium
Skill: Level 2: Using definitions
Section: Checkpoint 4.3
Status: Old
AACSB: Reflective thinking
93) Which of the following is the best explanation for why the price of gasoline increases during the summer months?
   A) Oil producers have higher costs of production in the summer.
   B) Sellers have to earn profits during the summer to cover losses in the winter.
   C) There is increased driving by families going on vacation.
   D) There is less competition among oil refineries in the summer.
   E) The number of gas stations open 24 hours a day rises in the summer months and so the price must rise to cover the higher costs.

Answer: C

94) The number of people looking to buy ceiling fans increases, so there is an increase in the
   A) quantity of ceiling fans demanded and a surplus of ceiling fans.
   B) demand for ceiling fans and a rise in the price of a ceiling fan.
   C) demand for ceiling fans and a surplus of ceiling fans.
   D) supply of ceiling fans and no change in the price of a ceiling fan.
   E) demand for ceiling fans and in the supply of ceiling fans.

Answer: B

95) When the demand for a good decreases, its equilibrium price ______ and equilibrium quantity ______.
   A) falls; decreases
   B) falls; increases
   C) rises; decreases
   D) rises; increases
   E) falls; does not change

Answer: A
96) A technological improvement lowers the cost of producing corn. As a result, the price of a pound of corn _______ and the quantity of corn _______.
   A) rises; increases
   B) rises; decreases
   C) falls; increases
   D) falls; decreases
   E) falls; does not change
Answer: C

97) The technology associated with manufacturing computers has advanced enormously. This change has led to the price of a computer _______ and the quantity _______.
   A) rising; increasing
   B) rising; decreasing
   C) falling; increasing
   D) falling; decreasing
   E) falling; not changing
Answer: C
98) The graph illustrates the market for bottled water. If the producers of bottled water switch to using improved technology, then the
A) supply of bottled water decreases.
B) quantity demanded of bottled water increases.
C) quantity demanded of bottled water does not change.
D) price of bottled water rises.
E) supply curve shifts leftward.
Answer: B
Topic: Effects of an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

99) Suppose that the price of lettuce used to produce tacos increases. This change means that the equilibrium price of a taco _______ and the equilibrium quantity _______.
A) rises; increases
B) rises; decreases
C) falls; increases
D) falls; decreases
E) does not change; decreases
Answer: B
Topic: Effects of a decrease in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
100) Suppose a medical study reveals new benefits to consuming beef and at the same time a bumper corn crop reduces the cost of feeding steers. The equilibrium quantity of beef will
A) decrease.
B) perhaps increase, decrease, or stay the same, but more information is needed to determine which it does.
C) stay the same.
D) increase.
E) definitely either stay the same or decrease.

Answer: D

Topic: Effects of an increase in demand and an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

101) Candy makers accurately anticipate the increase in demand for candy for Halloween so that the supply of candy and demand for candy increase the same amount. As a result, the price of candy _______ and the quantity of candy _______.
A) rises; does not change
B) falls; increases
C) does not change; increases
D) does not change; does not change
E) rises; increases

Answer: C

Topic: Effects of an increase in demand and an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
102) The graph illustrates the market for British pounds, the currency of the United Kingdom. As the number of buyers of pounds increases and the number of sellers of pounds increases, the equilibrium price of a pound
A) will rise.
B) will fall
C) will remain the same.
D) might rise, fall, or remain the same depending on whether the effect on buyers is larger than, less than, or the same as the effect on sellers.
E) None of the above answers is correct.

Answer: D

Topic: Effects of an increase in demand and an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
103) The graph illustrates the market for computers. If the number of buyers of computers increases and technology advances, you predict that the
   A) equilibrium quantity of computers will increase.
   B) equilibrium quantity of computers will decrease.
   C) equilibrium price of a computer will rise.
   D) equilibrium price of a computer will fall.
   E) equilibrium quantity of computers might increase, decrease, or not change.

Answer: A
Topic: Effects of an increase in demand and an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACS B: Analytical thinking

104) Which of the following definitely results in a product’s equilibrium price rising?
   A) an increase in both demand and supply
   B) a decrease in both demand and supply
   C) an increase in demand combined with a decrease in supply
   D) a decrease in demand combined with an increase in supply
   E) an increase in the supply combined with no change in the demand

Answer: C
Topic: Effects of an increase in demand and a decrease in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACS B: Analytical thinking
105) During 2008 the supply of gasoline decreased while at the same time the demand for gasoline increased. If the magnitude of the increase in demand was greater than the magnitude of the decrease in supply, then the equilibrium price of gasoline _______ and the equilibrium quantity _______
A) increased; increased
B) increased; decreased
C) increased; did not change
D) decreased; did not change
E) did not change; increased
Answer: A

Topic: Effects of an increase in demand and a decrease in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

106) The graph illustrates the market for British pounds, the currency of the United Kingdom. As the number of buyers of pounds decreases and the number of sellers of pounds increases, the equilibrium price of a pound
A) will rise.
B) will fall
C) will remain the same.
D) might rise, fall, or remain the same but more information is needed.
E) will rise if the magnitude of the effect on the buyers is larger than the magnitude of the effect on the sellers.
Answer: B

Topic: Effects of a decrease in demand and an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
4.4 Integrative Questions

1) Consider the market for bread. If the price of wheat rises, then the
   A) demand curve for bread shifts leftward.
   B) supply curve of bread shifts leftward.
   C) price of bread falls.
   D) equilibrium quantity of bread increases.
   E) demand curve for bread shifts rightward.
Answer: B

Topic: Integrative
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACSB: Reflective thinking

2) Consider the market for turkeys. In the United States, because of Thanksgiving in the month of November,
   A) there is a downward movement along the demand curve for turkeys.
   B) there is an upward movement along the supply curve for turkeys.
   C) the supply curve of turkeys shifts leftward.
   D) the demand curve for turkeys shifts leftward.
   E) neither the demand curve nor the supply curve shift; instead there is a movement along both curves.
Answer: B

Topic: Integrative
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACSB: Reflective thinking

3) Consider the market for feather pillows. If there is an increase in the price of feather dusters, a substitute in production for feather pillows, then
   A) the price of feather pillows decreases.
   B) the demand curve for feather pillows shifts leftward.
   C) the supply curve for feather pillows shifts leftward.
   D) there is a downward movement along the demand curve for feather pillows.
   E) the demand curve for feather pillows shifts rightward.
Answer: C

Topic: Integrative
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACSB: Reflective thinking
4) Consider the market for peanut butter. If there is an increase in the price of peanuts,
   A) there is an upward movement along the supply curve for peanut butter.
   B) the supply curve for peanuts shifts rightward.
   C) there is a decrease in the supply of peanuts.
   D) there is a decrease in the supply of peanut butter.
   E) there is a decrease in the demand for peanut butter.

Answer: D

Topic: Integrative
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACS: Reflective thinking

5) Peanut butter and jelly are complements for many consumers. Consider the market for peanut butter. If there is an increase in the price of jelly,
   A) there is a movement along the supply curve of peanut butter.
   B) the price of peanut butter rises.
   C) the quantity of peanut butter increases.
   D) there is a shift in the supply curve for jelly.
   E) the demand curve for peanut butter does not shift; instead there is a movement along it.

Answer: A

Topic: Integrative
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACS: Reflective thinking

6) Consider the market for wheat. If there is an improvement in harvesting technology,
   A) the supply curve for wheat shifts rightward.
   B) the demand curve for wheat shifts rightward.
   C) there is a movement up along the demand curve.
   D) the equilibrium price rises.
   E) the demand curve for wheat shifts leftward.

Answer: A

Topic: Integrative
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACS: Reflective thinking
7) Consider the market for camera film. If more people start using digital cameras, which do not require film,
   A) the supply curve of film shifts rightward.
   B) the demand curve for film shifts leftward.
   C) there is a movement up along the demand curve for film.
   D) there is a movement down along the demand curve for film.
   E) neither the demand curve nor the supply curve for film shifts; instead there is a movement along both.

Answer: B

*Topic: Integrative
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACSB: Reflective thinking*
8) The above figures show the market for HD televisions. If people’s incomes increase and HD televisions are a normal good, which figure shows the effect of this change?

A) Figure A
B) Figure B
C) Figure C
D) Figure D
E) None of the figures represent this change.

Answer: A

Topic: Changes in demand
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACSB: Analytical thinking
9) The above figures show the market for HD televisions. Blu-ray players can be used to play HD movies. If the price of Blu-ray players falls, then which figure shows the effect of this change in the market for HD televisions?

   A) Figure A
   B) Figure B
   C) Figure C
   D) Figure D
   E) None of the figures represent this change.

Answer: A

Topic: Changes in demand, price of a complement
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACSB: Analytical thinking

10) The above figures show the market for HD televisions. If research is published showing that watching HD television shows causes eye damage, then which figure shows the effect of this change?

   A) Figure A
   B) Figure B
   C) Figure C
   D) Figure D
   E) None of the figures represent this change.

Answer: B

Topic: Changes in demand, preferences
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACSB: Analytical thinking

11) The above figures show the market for HD televisions. If cable television providers lower the price of providing HD cable service, which figure shows the effect of this change?

   A) Figure A
   B) Figure B
   C) Figure C
   D) Figure D
   E) None of the figures represent this change.

Answer: A

Topic: Changes in demand, price of a complement
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACSB: Analytical thinking
12) The above figures show the market for HD televisions. If the price of the LCD screens used to produce these televisions falls, which figure shows the effect of this change in price?
   A) Figure A
   B) Figure B
   C) Figure C
   D) Figure D
   E) None of the figures represent this change.

   Answer: C

   Topic: Changes in supply, price of a resource
   Skill: Level 3: Using models
   Section: Integrative
   Status: Old
   AACSB: Analytical thinking

13) The above figures show the market for HD televisions. If there are severe earthquakes that destroy a significant number of HD television manufacturing plants, which figure shows the effect of the earthquake?
   A) Figure A
   B) Figure B
   C) Figure C
   D) Figure D
   E) None of the figures represent this change.

   Answer: D

   Topic: Changes in supply, number of sellers
   Skill: Level 3: Using models
   Section: Integrative
   Status: Old
   AACSB: Analytical thinking

14) The above figures show the market for HD televisions. If more firms start to produce HD televisions, which figure shows the effect of this change?
   A) Figure A
   B) Figure B
   C) Figure C
   D) Figure D
   E) None of the figures represent this change.

   Answer: C

   Topic: Changes in supply, number of sellers
   Skill: Level 3: Using models
   Section: Integrative
   Status: Old
   AACSB: Analytical thinking
15) The above figures show the market for HD televisions. If the technology used to produce these televisions advances so that productivity increases, which figure shows the effect of this change?
   A) Figure A
   B) Figure B
   C) Figure C
   D) Figure D
   E) None of the figures represent this change.

Answer: C

Topic: Changes in supply, productivity
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACSBA: Analytical thinking

16) Consider the market for leather shoes. If producers believe the price of leather shoes will increase next month, today
   A) the supply curve for leather shoes shifts rightward.
   B) the supply curve for leather shoes shifts leftward.
   C) there is a movement along the supply curve for leather shoes.
   D) the equilibrium price of leather shoes falls.
   E) the equilibrium quantity of leather shoes increases.

Answer: B

Topic: Integrative
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACSBA: Reflective thinking

17) Consider the market for peanut butter. If there is an increase in the price of bread (a complement for peanut butter) along with a drought in peanut growing areas, the
   A) equilibrium quantity of bread increases.
   B) equilibrium quantity of peanut butter definitely decreases.
   C) equilibrium quantity of peanut butter might increase or might decrease.
   D) equilibrium price of peanut butter definitely rises.
   E) equilibrium price of peanut butter definitely falls.

Answer: B

Topic: Integrative
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACSBA: Analytical thinking
18) Consider the market for peanut butter. If there is a decrease in the price of deli turkey slices (a substitute in consumption for peanut butter) along with a decrease in the price of peanut brittle (a substitute in production for peanut butter), the

A) equilibrium price of peanut butter definitely falls.
B) equilibrium quantity of peanut definitely decreases.
C) equilibrium price of peanut butter might rise or fall.
D) equilibrium quantity of peanut butter definitely increases.
E) equilibrium price of peanut butter definitely rises.

Answer: A

Topic: Integrative
Skill: Level 3: Using models
Section: Integrative
Status: Old
AACSB: Analytical thinking

19) Millions of people from Mexico have migrated to the United States. This has reduced the supply of labor in Mexico and increased the supply of labor in the United States. Assume that the demand for labor in Mexico and the United States is unchanged. Then wages in the United States ______ and wages in Mexico ______.

A) fall; rise
B) rise; rise
C) rise; do not change
D) fall; fall
E) do not change; fall

Answer: A

Topic: Integrative
Skill: Level 4: Applying models
Section: Integrative
Status: Old
AACSB: Analytical thinking

4.5 Essay: Demand

1) What is the law of demand?

Answer: The law of demand states that other things remaining the same, if the price of a good rises, the quantity demanded of that good decreases, and if the price of a good falls, the quantity demanded of that good increases.

Topic: Law of demand
Skill: Level 1: Definition
Section: Checkpoint 4.1
Status: Old
AACSB: Reflective thinking

2) What leads to a decrease in the quantity demanded of a good or service?

Answer: The quantity demanded of a good or service decreases when the price of the product increases.

Topic: Law of demand
Skill: Level 1: Definition
Section: Checkpoint 4.1
Status: Old
AACSB: Reflective thinking
3) Explain the difference between a change in demand and a change in quantity demanded. What leads to each of these changes?

Answer: A change in demand occurs when consumers will buy more or less of a product at every price; a change in the quantity demanded occurs when the price changes and consumers buy more or less. A change in demand is reflected by a shift of the entire demand curve, while a change in the quantity demanded is reflected by a movement along one demand curve.

Only a change in the price of the good brings about a change in the quantity demanded. A change in demand is brought about by a change in any of the other influences on demand, namely, the prices of related goods, income, expectations, the number of buyers, and preferences.

Topic: Changes in quantity demanded versus change in demand
Skill: Level 1: Definition
Section: Checkpoint 4.1
Status: Old
AACS: Written and oral communication

4) List the factors that change demand and shift the demand curve. Tell what happens to demand and the demand curve when there is an increase in the factor.

Answer: One factor that changes demand is a change in income. An increase in income increases demand and shifts the demand curve rightward for a normal good. An increase in income decreases demand and shifts the demand curve leftward for an inferior good. A change in the price of a substitute or complement also changes demand. An increase in the price of a substitute increase demand and shifts the demand curve rightward while an increase in the price of a complement decreases demand and shifts the demand curve leftward. Expectations, the number of buyers, and preferences also change demand. If people expect their income to increase, or if they expect its price to be higher in the future, or if the number of buyers increases, or if people’s preferences for the good increase, demand increases and the demand curve shifts rightward.

Topic: Changes in demand
Skill: Level 2: Using definitions
Section: Checkpoint 4.1
Status: Old
AACS: Written and oral communication

5) Computers are a complement to computer software. Suppose the price of a computer falls. How does this fall in price affect the demand for computer software and the demand curve for computer software?

Answer: The fall in price of a complement increases the demand for a product. Hence the fall in the price of a computer increases the demand for computer software and shifts the demand curve for computer software rightward.

Topic: Changes in demand, price of a complement
Skill: Level 3: Using models
Section: Checkpoint 4.1
Status: Old
AACS: Written and oral communication
6) What is the difference between a normal good and an inferior good? Give an example of each.

Answer: A good is a normal good if an increase in incomes leads to an increase in demand for a good. Most goods are normal goods. An example of a normal good is new clothes. A good is an inferior good if an increase in income leads to a decrease in demand for the good. Second-hand clothing that can be purchased at thrift stores is an inferior good.

<table>
<thead>
<tr>
<th>Price (dollars per gallon of ice cream)</th>
<th>Katie</th>
<th>Mark</th>
<th>Bobby</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>3</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>10</td>
<td>3</td>
</tr>
</tbody>
</table>

7) Suppose Katie, Mark, and Bobby are the only consumers in the market for ice cream. Using the demand schedules in the table above, what is the market demand curve for ice cream?

Answer:

<table>
<thead>
<tr>
<th>Price (dollars per gallon of ice cream)</th>
<th>Quantity demanded (gallons of ice cream per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
</tr>
</tbody>
</table>
8) Soft drinks and milk are substitutes for consumers. Draw a graph showing the effect of an increase in the price of milk on the demand for soft drinks.

Answer:

![Graph showing the effect of an increase in the price of milk on the demand for soft drinks.](image)

*Topic: Changes in demand, price of a substitute*

*Skill: Level 3: Using models*

*Section: Checkpoint 4.1*

*Status: Old*

*AACSB: Analytical thinking*
9) Soft drinks are a normal good. Draw a graph showing the effect of an increase in income on the demand for soft drinks.

Answer:

![Graph showing the effect of an increase in income on the demand for soft drinks.]

**Topic:** Changes in demand, income  
**Skill:** Level 3: Using models  
**Section:** Checkpoint 4.1  
**Status:** Old  
**AACSBI:** Analytical thinking

4.6 Essay: Supply

1) What leads to a decrease in the quantity supplied of a good or service?

Answer: The quantity supplied of a good or service decreases when the price of the good or service decreases.  
**Topic:** Quantity supplied  
**Skill:** Level 1: Definition  
**Section:** Checkpoint 4.2  
**Status:** Old  
**AACSBI:** Reflective thinking
2) What is the difference between quantity supplied and supply?
Answer: Quantity supplied is the amount that people are willing to sell during a specific period for a specific price. It deals with one quantity at one price. Supply is the relationship between the quantity supplied and the price of the good. Supply applies to various prices and various quantities.

Topic: Changes in quantity supplied versus change in supply
Skill: Level 1: Definition
Section: Checkpoint 4.2
Status: Old
AACS: Reflective thinking

3) List the factors that change supply and shift the supply curve. Tell what happens to supply and the supply curve when there is an increase in the factor.
Answer: The factors that change supply are productivity, the number of sellers, expectations, prices of resources, and prices of related goods. An increase in productivity, an increase in the price of a complement in production, a decrease in expected future prices, and an increase in the number of sellers all lead to an increase in supply and a rightward shift in the supply curve. An increase in the price of a substitute in production or an increase in the prices of inputs leads to a decrease in supply and a leftward shift in the supply curve.

Topic: Changes in supply
Skill: Level 2: Using definitions
Section: Checkpoint 4.2
Status: Old
AACS: Written and oral communication

4) What are substitutes in production?
Answer: Goods are substitutes in production when one can be produced in place of the other, that is, when the goods are produced using the same resources.

Topic: Substitutes in production
Skill: Level 1: Definition
Section: Checkpoint 4.2
Status: Old
AACS: Reflective thinking

5) Suppose that the number of companies selling computer software decreases. How does this change affect the supply of computer software and the supply curve of computer software?
Answer: A decrease in the number of sellers decreases the supply. Hence the decrease in the number of companies selling computer software decreases the supply of computer software and shifts the supply curve of computer software leftward.

Topic: Changes in supply, number of sellers
Skill: Level 3: Using models
Section: Checkpoint 4.2
Status: Old
AACS: Reflective thinking
6) Suppose that the productivity used to produce computers advances. How does this change affect the supply of computers and the supply curve of computers?

Answer: An advance in productivity increases the supply of computers. Hence increases in productivity shift the supply curve of computers rightward.

Topic: Changes in supply, productivity  
Skill: Level 3: Using models  
Section: Checkpoint 4.2  
Status: Old  
AACSBS: Reflective thinking

<table>
<thead>
<tr>
<th>Price (dollars per half gallon)</th>
<th>Ben &amp; Jerry's</th>
<th>Haagen Dazs</th>
<th>Edy's</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>18</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>14</td>
<td>25</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>20</td>
<td>6</td>
</tr>
</tbody>
</table>

7) The table above indicates how many thousands of containers of ice cream three different companies are willing to produce at different prices. Does this information reflect the law of supply? Why or why not?

Answer: Yes, the information in the table is in accord with the law of supply because for all three companies, as the price rises (falls), the quantity supplied increases (decreases).

Topic: Law of supply  
Skill: Level 2: Using definitions  
Section: Checkpoint 4.2  
Status: Old  
AACSBS: Reflective thinking

<table>
<thead>
<tr>
<th>Price (dollars per manicure)</th>
<th>Nancy's Nails</th>
<th>Fancy Nails</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>15</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>20</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>25</td>
<td>16</td>
<td>23</td>
</tr>
</tbody>
</table>

8) The table above shows supply schedules for the two nail salons in town, Nancy's Nails and Fancy Nails. What is the market supply of manicures?

Answer:

<table>
<thead>
<tr>
<th>Price (dollars per manicure)</th>
<th>Quantity supplied (manicures per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>15</td>
<td>26</td>
</tr>
<tr>
<td>20</td>
<td>34</td>
</tr>
<tr>
<td>25</td>
<td>39</td>
</tr>
</tbody>
</table>

Topic: Market supply  
Skill: Level 2: Using definitions  
Section: Checkpoint 4.2  
Status: Old  
AACSBS: Analytical thinking
4.7 Essay: Market Equilibrium

1) When does a shortage occur?
Answer: A shortage occurs when the price is below the equilibrium price. When the price is less than the equilibrium price, the quantity demanded is greater than the quantity supplied.

Topic: Shortage
Skill: Level 2: Using definitions
Section: Checkpoint 4.3
Status: Old
AACSB: Reflective thinking

2) When does a surplus occur?
Answer: A surplus occurs when the price is above the equilibrium price. When the price exceeds the equilibrium price, the quantity supplied is greater than the quantity demanded.

Topic: Surplus
Skill: Level 2: Using definitions
Section: Checkpoint 4.3
Status: Old
AACSB: Reflective thinking

3) At prices above the equilibrium price, what occurs?
Answer: If the price exceeds the equilibrium price, there is a surplus because the quantity supplied exceeds the quantity demanded. With a surplus, the law of market forces points out that the price will fall. As the price falls, the quantity supplied decreases and the quantity demanded increases, thus decreasing the size of the surplus. The price will continue to fall as long as there is a surplus, that is, as long as the price exceeds the equilibrium price. Ultimately the price will fall to equal the equilibrium price, at which time the surplus will be eliminated and the price will no longer change.

Topic: Surplus
Skill: Level 2: Using definitions
Section: Checkpoint 4.3
Status: Old
AACSB: Written and oral communication

4) When the demand for blue jeans increases, what happens next?
Answer: If the demand for blue jeans increases, then at all prices buyers are more willing and more able to buy blue jeans. The demand curve for blue jeans shifts rightward. With the curve shifts, at the initial price a shortage of jeans will emerge. The law of market forces drives the price higher. Hence an increase in demand for blue jeans leads to a rise in the price of a pair of blue jeans and an increase in the quantity of blue jeans.

Topic: Effects of a change in demand
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Written and oral communication
5) Suppose Ramen noodles, an inexpensive but a quite tasty dish, are an inferior good. Why do grocery stores in college towns, that is, towns with a large fraction of college students, stock a lot of Ramen noodles?

Answer: Generally, college students' incomes are relatively low because they cannot hold high paying, full-time jobs. Hence the demand for inferior goods is strong in college towns. Hence the demand curve for Ramen noodles in a college town lies to the right of the demand curve for Ramen noodles in a similar size town not dominated by a college. Thus the equilibrium quantity of Ramen noodles is quite large in a college town and so stores stock a lot of Ramen noodles.

Topic: Effects of a change in demand
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Written and oral communication

6) Why does an increase in supply lead to lower prices?

Answer: When the supply of a good, such as computers, increases, the supply curve shifts rightward. This shift means sellers are more willing and more able to sell computers at all prices than they were before. When this change occurs, a surplus of computers breaks out. With the surplus, the law of market forces drives the price lower and thereby eliminates the surplus.

Topic: Effects of a change in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Written and oral communication

7) Smart phones are becoming less expensive as new technology reduces the cost of production. In a supply and demand model, explain the effects of the technological innovations and their effect on the quantity of smart phones.

Answer: Advances in technology increase the supply of smart phones and the supply curve of smart phones shifts rightward. The demand curve does not shift. Rather, on the demand side there is an increase in quantity demanded, or movement along the curve, in response to the falling price. The equilibrium price of a smart phone falls and the equilibrium quantity of smart phones increases.

Topic: Effects of a change in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Written and oral communication
8) What is the effect on the price and quantity of a product if both the demand and supply simultaneously increase?

Answer: The equilibrium quantity unambiguously increases. The effect on the equilibrium price is ambiguous. The equilibrium price rises if the increase in demand exceeds the increase in supply. The equilibrium price falls if the increase in supply exceeds the increase in demand. The equilibrium price is unchanged if the increase in demand equals the increase in supply.

Topic: Effects of an increase in demand and an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

9) What is the effect on the price and quantity of a product if the demand decreases and the supply simultaneously increases?

Answer: The equilibrium price unambiguously falls. The effect on the equilibrium quantity is ambiguous. The equilibrium quantity decreases if the decrease in demand exceeds the increase in supply. The equilibrium quantity increases if the increase in supply exceeds the decrease in demand. The equilibrium quantity is unchanged if the decrease in demand equals the increase in supply.

Topic: Effects of a decrease in demand and an increase in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

10) For consumers, computers are a complement to computer software. Suppose the price of a computer falls. Simultaneously, suppose that the number of companies selling computer software decreases. How do these changes affect the price and quantity of computer software?

Answer: The fall in the price of a computer increases the demand for computer software and the demand curve for computer software shifts rightward. A decrease in the number of sellers decreases the supply of computer software and the shifts the supply curve of computer software leftward. The increase in demand and decrease in supply both raise the price, so the price definitely rises. The increase in demand increases the quantity and the decrease in supply decreases the quantity. Hence the net effect on the quantity is ambiguous.

Topic: Effects of an increase in demand and a decrease in supply
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
11) In early 2012 the price of computer hard disc drives rose. In a demand and supply model, shifts in what curve or curves could have brought about the higher price?

Answer: The higher price could have been brought about by an increase in demand, a decrease in supply, or the combination of an increase in demand combined with a decrease in supply. Hence the higher price could have been the result of a rightward shift in the demand curve, a leftward shift in the supply curve, or a combined rightward shift of the demand curve and leftward shift of the supply curve.

**Topic:** Effects of an increase in demand and a decrease in supply  
**Skill:** Level 3: Using models  
**Section:** Checkpoint 4.3  
**Status:** Old  
**AACS B:** Analytical thinking

<table>
<thead>
<tr>
<th>Quantity demanded (tons of cat food per year)</th>
<th>Price (dollars per pound of cat food)</th>
<th>Quantity supplied (tons of cat food per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>1.00</td>
<td>15</td>
</tr>
<tr>
<td>46</td>
<td>1.50</td>
<td>26</td>
</tr>
<tr>
<td>43</td>
<td>2.00</td>
<td>34</td>
</tr>
<tr>
<td>40</td>
<td>2.50</td>
<td>40</td>
</tr>
<tr>
<td>35</td>
<td>3.00</td>
<td>44</td>
</tr>
</tbody>
</table>

12) The above table gives the demand and supply schedules for cat food. If the price is $3.00 per pound of cat food, will there be a shortage, a surplus, or is this price the equilibrium price? If there is a shortage, how much is the shortage? If there is a surplus, how much is the surplus? If $3.00 is the equilibrium price, what is the equilibrium quantity?

Answer: At a price of $3.00 per pound of cat food, there is a surplus. The surplus equals 44 tons (the quantity supplied) minus 35 tons (the quantity demanded), or 9 tons of cat food.

**Topic:** Surplus  
**Skill:** Level 3: Using models  
**Section:** Checkpoint 4.3  
**Status:** Old  
**AACS B:** Analytical thinking

13) The above table gives the demand and supply schedules for cat food. If the price is $1.00 per pound of cat food, will there be a shortage, a surplus, or is this price the equilibrium price? If there is a shortage, how much is the shortage? If there is a surplus, how much is the surplus? If $3.00 is the equilibrium price, what is the equilibrium quantity?

Answer: At a price of $1.00 per pound of cat food, there is a shortage. The shortage equals 52 tons (the quantity demanded) minus 15 tons (the quantity supplied), or 37 tons of cat food.

**Topic:** Shortage  
**Skill:** Level 3: Using models  
**Section:** Checkpoint 4.3  
**Status:** Old  
**AACS B:** Analytical thinking
14) The above table gives the demand and supply schedules for cat food. What is the equilibrium price and quantity?

Answer: The equilibrium price is $2.50 per pound of cat food because that is the price at which the quantity demanded equals the quantity supplied. The equilibrium quantity of cat food is 40 tons per year.

Topic: Equilibrium price and quantity
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking

15) The above table gives the demand and supply schedules for cat food. If the supply increases by 20 tons at every price, what is the new equilibrium price and quantity?

Answer: The equilibrium price is $1.50 per pound of cat food because that is the price at which the quantity demanded equals the (new) quantity supplied. The equilibrium quantity of cat food is 46 tons per year.

Topic: Effects of a change in demand
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
16) The diagram above illustrates the market for apartments in Victoria, British Columbia.

a. If the current rent is $300 per month, is there a shortage or surplus in the apartment market and how much is the shortage or surplus?

b. What is the equilibrium rent and quantity of apartments?

Answer: a. If the rent is $300 per month, there is a shortage of 30,000 apartments.

b. The equilibrium rent is $400 per month and the equilibrium quantity is 40,000 apartments.

Topic: Shortage
Skill: Level 3: Using models
Section: Checkpoint 4.3
Status: Old
AACSB: Analytical thinking
17) In the figure above, if the price is $8 a unit, is there a shortage or surplus and what is the amount of any shortage or surplus?

Answer: At a price of $8 there is a surplus because the quantity supplied exceeds the quantity demanded. The amount of the surplus is 4 units per month.

18) In the figure above, what is the equilibrium price and quantity?

Answer: The equilibrium price is $4 a unit and the equilibrium quantity is 3 units per month.
19) Last year a very severe ice storm hit the north counties of New York state, and the states of Vermont and Maine. Electric poles were down and no one had power for days. It was reported that the price of kerosene heaters skyrocketed and the number purchased increased during this time. Using a supply and demand diagram, show the impact of the ice storm on the market for kerosene heaters.

Answer:

\[ \begin{align*}
\text{Price (dollars per kerosene heater)} \\
\text{Quantity (kerosene heaters per week)}
\end{align*} \]

\[ \begin{align*}
P_1 & \quad \text{Initial Price} \\
Q_1 & \quad \text{Initial Quantity} \\
Q_2 & \quad \text{Final Quantity} \\
D_1 & \quad \text{Initial Demand Curve} \\
D_2 & \quad \text{Final Demand Curve} \\
S & \quad \text{Supply Curve}
\end{align*} \]

*Topic: Effects of a change in demand*
*Skill: Level 3: Using models*
*Section: Checkpoint 4.3*
*Status: Old*
*AACSB: Analytical thinking*
20) Consumers can use either natural gas or heating oil to warm their houses. Suppose the price of natural gas increases. Use a demand and supply diagram to show the impact of the higher price of natural gas on the market for home heating oil.

Answer:

![Demand and supply diagram](image)

*Price (dollars per gallon of heating oil)*

*Quantity (gallons of heating oil per week)*

**Topic:** Effects of a change in demand  
**Skill:** Level 3: Using models  
**Section:** Checkpoint 4.3  
**Status:** Old  
**AACSB:** Analytical thinking
Chapter 5  GDP: A Measure of Total Production and Income

5.1 GDP, Income, and Expenditure

1) A measure of a country’s production is its
   A) gross daily production.
   B) general daily product.
   C) general domestic production.
   D) gross domestic product.
   E) gross total output.

Answer: D

2) The total production within an economy is measured as
   A) Gross Home Product.
   B) Total Domestic Output.
   C) Annual Production Value.
   D) Gross Domestic Product.
   E) Total Annual Output.

Answer: D

3) Gross Domestic Product is equal to the market value of all the final goods and services _______ in a given period of time.
   A) produced within a country
   B) consumed within a country
   C) consumed by the citizens of a country
   D) produced by the citizens of a country
   E) produced and consumed within a country

Answer: A
4) Gross Domestic Product measures the
   A) quantity of the goods and services produced in a given year, listed item by item, within a country.
   B) income of the business sector within a country.
   C) market value of the final goods and services produced in a given year within a country.
   D) measures the market value of the domestic labor in a given year within a country.
   E) market value of the final goods and services consumed by households in a given year within a country.
   Answer: C

    Topic: GDP
    Skill: Level 1: Definition
    Section: Checkpoint 5.1
    Status: Old
    AACSB: Reflective thinking

5) Gross Domestic Product is the market value of all _______ produced within a country in a given period of time.
   A) final goods
   B) intermediate goods
   C) final services
   D) intermediate services
   E) final goods and services
   Answer: E

    Topic: GDP
    Skill: Level 1: Definition
    Section: Checkpoint 5.1
    Status: New
    AACSB: Reflective thinking

6) To calculate GDP it is necessary to
   A) add the total amounts of all the goods produced.
   B) use the market price to place a dollar value on each good produced.
   C) use production cost to place a dollar value on all goods produced.
   D) use the average market price over the last five years to place a dollar value on all goods produced.
   E) average the cost of producing a good with the price of the good to place a dollar value on all goods produced.
   Answer: B

    Topic: GDP
    Skill: Level 1: Definition
    Section: Checkpoint 5.1
    Status: Old
    AACSB: Reflective thinking
7) How are final goods and services valued when measuring nominal GDP?
   A) at current market prices
   B) at base year prices
   C) at foreign exchange parity
   D) at factor market prices
   E) at producer cost
   Answer: A
   Topic: GDP
   Skill: Level 1: Definition
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking

8) Measuring total production by valuing items at their market value allows us to
   A) separate the value of different goods with identical prices.
   B) separate the value of different goods with different prices.
   C) add together the value of different goods that have different prices.
   D) add together the value of identical goods that have identical prices.
   E) ignore the problem that goods and services differ in how long they last.
   Answer: C
   Topic: GDP
   Skill: Level 1: Definition
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking

9) Wobet is a small country that produces only steak and potatoes. Steaks have a price of $10 each and potatoes have a price of $1 each. Suppose that Wobet produces 10 steaks and 20 potatoes in 2010. Using ________, Wobet has GDP equal to ________.
   A) market value; 30 units
   B) a market basket; 30 units
   C) market value; $120
   D) real value; $120
   E) a price index; $120
   Answer: C
   Topic: GDP
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking
10) To calculate GDP it is necessary to add up the market value of all the ______ produced within a country during a year.
   A) goods but not services produced
   B) goods and services produced
   C) intermediate goods and services produced
   D) final goods and services produced
   E) intermediate goods and services produced and all the final goods and services produced
   Answer: D

11) GDP is best defined as the ______ in a given time period.
    A) number of goods and services produced within a country
    B) number of final goods and services produced within a country
    C) market value of the final goods and services produced within a country
    D) market value of the final goods and services consumed by a nation’s citizens
    E) market value of all the goods and services produced within a country
   Answer: C

12) If you make dinner for yourself,
    A) the market value of your dinner is added to GDP.
    B) your service in preparing the meal is valued at a cook’s wage and added to GDP.
    C) none of what you bought to prepare for dinner is included in GDP.
    D) only the market value of ingredients that you purchased this year is added to GDP.
    E) the difference between the cost of the ingredients that you purchased this year and the market value of the dinner is added to GDP.
   Answer: D
13) Gross Domestic Product is defined to be the market value of all the final goods and services produced during a given time period
   A) within a country.
   B) within and outside a country by that country’s citizens.
   C) by citizens of the country, regardless of their place of residence.
   D) by only legal residents of the country.
   E) within a country minus the market value of all the final goods and services produced by that country’s citizens outside the country.

   Answer: A
   Topic: GDP
   Skill: Level 1: Definition
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking

14) Where are the final goods and services produced that are included in Germany’s GDP?
   A) within Germany
   B) anywhere, as long as they are produced using German resources
   C) outside of Germany
   D) anywhere, as long as they are produced using German labor
   E) within Germany but only if they are produced using only German resources

   Answer: A
   Topic: GDP
   Skill: Level 1: Definition
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking

15) GDP includes the goods and services produced
   A) within a country’s borders by citizens and by non-citizens.
   B) by a country’s legal citizens regardless of where in the world they are located.
   C) by a country’s citizens but not by non-citizens within the country’s borders.
   D) within a country’s borders by citizens and non-citizens plus goods produced abroad by the country’s citizens.
   E) within a country’s borders by citizens and by non-citizens minus the production abroad by the country’s citizens.

   Answer: A
   Topic: GDP
   Skill: Level 3: Using models
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking
16) Which of the following is included in Germany's GDP?
   
   i. BMWs produced in a German-owned factory in South Carolina 
   ii. the value of the stocks sold on the German stock exchange, the Frankfurt Stock Exchange 
   iii. china produced by the English-owned Wedgewood Company at a factory in Berlin, Germany 

A) i and iii 
B) ii only 
C) iii only 
D) i and ii 
E) None of the above answers is correct.

Answer: C

17) Which of the following is included in U.S. GDP?
   
   i. the rental value of homes owned by U.S. citizens 
   ii. the production of Suburban SUVs by GM in its plant in Mexico 
   iii. tickets sold by U2 for concerts held in the United States

A) ii only 
B) ii and iii 
C) i, ii and iii 
D) i and iii 
E) i only

Answer: D

18) Which of the following is NOT directly included in Canadian GDP?
   
   A) the purchase of tickets to a Kanye West concert in Montreal 
   B) the sale of tickets to the Vancouver Olympics to U.S. citizens 
   C) gasoline purchased by a tour bus operator in Quebec 
   D) bus tickets sold to tourists for a tour bus ride in Montreal 
   E) All of the items would be included in Canadian GDP.

Answer: C
19) Which of the following is NOT directly included in U.S. GDP?
   A) sales to tourists of beach umbrellas in Hilton Head, South Carolina
   B) sales of sandwiches at a Subway store in Bangor, Maine
   C) ticket sales to Ripley’s Aquarium in Gatlinburg, Tennessee
   D) popcorn purchased by a movie theater chain in Georgia
   E) movie tickets purchased by consumers in Georgia

   Answer: D
   Topic: GDP, final goods and services
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.1
   Status: New
   AACSB: Reflective thinking

20) Which of the following is classified as a final good or service?
   i. tires bought by GM to put on new Tahoes
   ii. mustard bought by Subway to put on its sub sandwiches
   iii. your purchase of online access to the Wall Street Journal

   A) i and ii
   B) i, ii and iii
   C) iii only
   D) ii and iii
   E) ii only

   Answer: C
   Topic: GDP, final goods and services
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking

21) Which of the following correctly describes a final good?
   i. A final good is bought by its final consumer.
   ii. A final good can be used by a firm as a component of another good or service.
   iii. Investment goods cannot be a final good.

   A) i only
   B) i and ii
   C) i, ii and iii
   D) i and iii
   E) ii and iii

   Answer: A
   Topic: GDP, final goods and services
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking
22) Which of the following is a final good or service?
   A) the grilled chicken purchased by Taco Bell for use in their burritos
   B) a new replacement muffler installed by Midas Mufflers
   C) the fertilizer purchased by Royal Lawn and Landscape
   D) the computers purchased by Office Depot for sale to its customers
   E) the CPUs purchased by Dell to be used in their computers

   Answer: B
   Topic: GDP, final goods and services
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.1
   Status: Old
   AACSBS: Reflective thinking

23) Which of the following is a final good or service?
   A) tires purchased by Ford for use on one of their SUVs
   B) the new economics textbook you are using
   C) the hair gels used by a hair stylist at the local hair salon
   D) the butter used by a chef to make butter cream frosting
   E) the taco shells purchased by Taco Bell for use in their tacos

   Answer: B
   Topic: Intermediate goods and services
   Skill: Level 1: Definition
   Section: Checkpoint 5.1
   Status: Old
   AACSBS: Reflective thinking

24) A restaurant buys fish to offer as a daily menu special. The purchase of the fish by the restaurant is
   A) a consumption expenditure.
   B) an investment.
   C) an intermediate good.
   D) an example of government expenditures on goods and services.
   E) part of net exports if the fish was caught beyond the U.S. border.

   Answer: C
   Topic: Intermediate goods and services
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.1
   Status: Checkpoint 5.1
   AACSBS: Reflective thinking
25) Which of the following is classified as an intermediate good?
   i. the purchase of a Big Mac by a college student
   ii. McDonald’s purchase of pickles
   iii. a McDonald’s restaurant owner’s interest payment for the loan on her building

   A) ii only
   B) ii and iii
   C) i only
   D) i and iii
   E) i, ii and iii

   Answer: A

26) Which of the following is an example of an intermediate good or service?
   A) gasoline purchased by Sam for her commute to work
   B) flour purchased by Jake to bake a cake for his spouse
   C) training seminars for employees of an accounting firm
   D) golf balls sold to Tiger Woods
   E) None of the above are examples of intermediate goods or services.

   Answer: C

27) Which of the following would NOT be directly included in the U.S. GDP in 2010?
   A) the market value of restaurant meals sold in 2010
   B) the market value of the jet fuel bought by Delta to use for its flights in 2010
   C) the value of the automobiles produced in 2010 at the Toyota plant located in Georgetown, Kentucky
   D) legal services provided to first time home buyers during 2010
   E) the purchase of a new home in Atlanta, Georgia in 2010

   Answer: B
28) One bag of coffee beans is sold for $7 to a cafe that uses it to brew coffee which it sells to customers for a total of $15. A second bag of coffee is sold directly to Joan for $7, who uses it to brew coffee for her family every morning. What is the contribution to GDP from the purchases of coffee beans and coffee?

A) $7  
B) $14  
C) $15  
D) $22  
E) $29

Answer: D

Topic: Intermediate goods and services
Skill: Level 2: Using definitions
Section: Checkpoint 5.1
Status: New
AACSB: Reflective thinking

29) Consumption expenditure includes spending
   A) on intermediate goods and services by firms.
   B) on office supplies by firms.
   C) by households.
   D) by households and spending on office supplies by firms.
   E) by governments when they are buying goods and services that consumers also buy.

Answer: C

Topic: Consumption expenditure
Skill: Level 1: Definition
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking

30) Consumption goods and services include
    A) washing machines and tickets to football games.
    B) new homes and existing homes (as long as improvements have been made to the existing home).
    C) tickets to concerts and medical care provided to veterans by the government.
    D) new and used textbooks as long as they are sold via stores or online.
    E) vacation time accumulated by workers.

Answer: A

Topic: Consumption expenditure
Skill: Level 1: Definition
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking

31) Expenditures on U.S. produced steaks, shoes, and doctor visits are most likely classified as
    A) consumption expenditure.
    B) investment.
    C) government expenditure on goods and services.
    D) net exports of goods and services.
    E) net imports of goods and services.

Answer: A

Topic: Consumption expenditure
Skill: Level 2: Using definitions
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking
32) Investment is the expenditure done by
   A) savers.
   B) firms.
   C) governments.
   D) the rest of the world.
   E) Both answers A and B are correct.
   Answer: B
   Topic: Investment
   Skill: Level 1: Definition
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking

33) Investment is defined as the purchase of
   A) any financial asset only.
   B) additions to inventories only.
   C) financial assets and inventories only.
   D) new capital goods and additions to inventories.
   E) new capital goods but not additions to inventories.
   Answer: D
   Topic: Investment
   Skill: Level 1: Definition
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking

34) Which of the following is included as investment in GDP?
   i. cars produced during the year but unsold at the end of the year
   ii. new capital equipment produced and purchased during the year
   iii. purchases of a company’s stocks and bonds
      A) i only
      B) ii only
      C) iii only
      D) i and ii
      E) i, ii, and iii
   Answer: D
   Topic: Investment
   Skill: Level 1: Definition
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking
35) Economists define investment to include purchases of
   A) capital goods and inventories.
   B) capital goods, household durable goods, and inventories.
   C) capital goods, such as tools, instruments, and buildings.
   D) capital goods, equity stocks, and bonds.
   E) capital goods, equity stocks, and inventories.

Answer: A

Topic: Investment
Skill: Level 1: Definition
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking

36) Investment includes
   A) GM’s purchase of robotic machinery.
   B) student purchases of laptops.
   C) Wal-Mart’s purchase of health insurance for its workers.
   D) the New York City Library’s purchase of new books.
   E) wages paid to military personnel.

Answer: A

Topic: Investment
Skill: Level 2: Using definitions
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking

37) In measuring GDP, which of the following is included?
   A) the value of preparing meals at home
   B) the value of stocks and bonds bought and sold
   C) the value of used goods when they are sold
   D) the value of increases in business inventories
   E) the value of durable consumption goods but not the value of nondurable consumption goods.

Answer: D

Topic: Investment, inventory
Skill: Level 2: Using definitions
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking
38) If a firm does not sell all of the goods that it produces in a given time period, then the goods
A) do not count in GDP ever.
B) do not count in GDP for that time period but always count next period.
C) count positively in GDP as inventory investment.
D) count negatively in GDP as inventory investment.
E) count in GDP the period they are sold to the final user.

Answer: C

39) This year a firm produces $100 million worth of cars this year and sells $102 million worth of cars. Which of the following is true?
A) GDP for this year will increase by $100 million.
B) GDP for this year will increase by $102 million.
C) Inventory investment will increase by $2 million.
D) GDP for this year will increase by $202 million.
E) The premise of the question is wrong because it is impossible for a firm to sell more than it produces in a given time period.

Answer: A

40) Bob’s Funky T-shirts began the year with 1,000 shirts in inventory, produced 10,000 shirts during the year and ended the year with 1,100 shirts in inventory. The 100 shirts added to his inventory will be classified as
A) consumption expenditure.
B) investment.
C) net exports of goods and services.
D) exports of goods and services.
E) nondurable consumption goods.

Answer: B
41) Kelly’s Surf Shop orders 5,000 new surfboards at the beginning of the year but only sells 4,500 by the end of the year. How are the 500 unsold surfboards accounted for in Gross Domestic Product?
   A) They will be included in the nondurable consumption category of GDP.
   B) They will be included in the residential investment category of GDP.
   C) They will be included in the government spending category of GDP.
   D) They will be included in the inventory investment category of GDP.
   E) They will be included in the durable consumption category of GDP.

   Answer: D
   Topic: Investment, inventory
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.1
   Status: New
   AACSB: Reflective thinking

42) When measuring GDP,
   A) the government sector is not included because it is the public sector not the private sector.
   B) the government sector is counted, and the value of the government sector in GDP is equal to its tax revenue.
   C) only the federal government's expenditure on goods and services are included.
   D) the expenditure on goods and services by all levels of government are included.
   E) the government sector is not counted because it does not produce goods and services.

   Answer: D
   Topic: Government expenditure on goods and services
   Skill: Level 1: Definition
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking

43) Government expenditures on goods and services include
   i. the New York City Library’s purchase of new books.
   iii. California’s payment of wages to prison guards.

   A) i and ii
   B) i and iii
   C) ii and iii
   D) i, ii and iii
   E) i only

   Answer: D
   Topic: Government expenditure on goods and services
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking
44) Net exports of goods and services is equal to the value of
   A) exports plus the value of imports.
   B) imports minus the value of exports.
   C) domestic consumption minus the value of imports.
   D) exports minus the value of imports.
   E) domestic consumption minus the value of exports.

   Answer: D

   Topic: Net exports of goods and services
   Skill: Level 1: Definition
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking

45) Net exports of goods and services are defined as the
    A) value of the goods we sell to foreigners.
    B) income we receive from selling goods to foreigners.
    C) value of exports minus the value of imports.
    D) value of exports minus the income we receive from foreigners.
    E) value of exports plus the income we receive from foreigners.

   Answer: C

   Topic: Net exports of goods and services
   Skill: Level 1: Definition
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking

46) U.S. net exports include
    A) sales of Hollywood movies to the rest of the world.
    B) the production of Ford Mustangs in China that are sold in China.
    C) Honda automobiles produced and sold in Japan.
    D) the sale of shares of Nike stock on the New York Stock Exchange.
    E) the sale of U.S. government securities to U.S. citizens.

   Answer: A

   Topic: Net exports of goods and services
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking
47) In calculating GDP, we must
   A) add the market value of imports and subtract the market value of exports.
   B) add the market value of exports and subtract the market value of imports.
   C) exclude net exports of goods and services (NX).
   D) add the value of the goods produced outside of the United States by American firms.
   E) subtract the market value of imports, because these goods are produced in a country other than the United States, and subtract the market value of exports, because these goods are consumed in a country other than the United States.

Answer: B

Topic: Net exports of goods and services
Skill: Level 1: Definition
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking

48) Which of the following expenditure components of GDP can be negative or positive?
   A) Consumption expenditure
   B) Investment
   C) Government expenditure on goods and services
   D) Net exports of goods and services
   E) None of the above because expenditure can never be negative.

Answer: D

Topic: Net exports of goods and services
Skill: Level 2: Using definitions
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking

49) Last year U.S. net exports of goods and services was negative. This fact means that last year
   A) there was an error made when calculating net exports of goods and services for the United States.
   B) the value of U.S. exports was greater than the value of U.S. imports.
   C) the value of U.S. exports was less than the value of U.S. imports.
   D) U.S. consumption expenditure plus investment was less than the value of exports plus the value of imports.
   E) U.S. consumption expenditure plus investment plus government expenditures on goods and services was less than the value of exports plus the value of imports.

Answer: C

Topic: Net exports of goods and services
Skill: Level 2: Using definitions
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking
   A) does not change; increases by $200; increases by $200
   B) increases by $200; decreases by $200; does not change
   C) increases by $200; does not change; increases by $200
   D) does not change; does not change; does not change
   E) does not change; decreases by $200; decreases by $200

Answer: B

Topic: Net exports of goods and services
Skill: Level 2: Using definitions
Section: Checkpoint 5.1
Status: New
AACSB: Reflective thinking

51) The purchase of a new Boeing fighter jet by Israel is classified in the U.S. GDP accounts as
   A) export expenditure.
   B) consumption expenditure.
   C) investment expenditure.
   D) government expenditure.
   E) import expenditure.

Answer: A

Topic: Net exports of goods and services
Skill: Level 2: Using definitions
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking

52) Gross Domestic Product equals
   A) \( Y = C + I - G + NX \).
   B) \( Y = C - I + G + NX \).
   C) \( Y = C + I + G + NX \).
   D) \( Y = C - I - G - NX \).
   E) \( Y = C + I + G - NX \).

Answer: C

Topic: Total expenditure
Skill: Level 1: Definition
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking
53) Last year in Candamica, consumption expenditure was $20 billion, interest, rent, and profit were $2.5 billion, government expenditure on goods and services was $7 billion, net exports of goods and services was $5 billion, and investment was $2 billion. Hence total expenditure was
A) $24.5 billion.
B) $34.5 billion.
C) $36.5 billion.
D) $34 billion.
E) undetermined without information about imports.
Answer: D
Topic: Total expenditure
Skill: Level 3: Using models
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking

54) Everything else the same, if government expenditure increases by $400 billion and imports increase by $400 billion, then GDP
A) increases by $400 billion.
B) increases by $200 billion.
C) decreases by $400 billion.
D) does not change.
E) decreases by $200 billion.
Answer: D
Topic: Total expenditure
Skill: Level 3: Using models
Section: Checkpoint 5.1
Status: Old
AACSB: Analytical thinking

55) Suppose that business firms spend $500 million on new capital equipment this year. Of this $500 million, $300 million was spent on domestically produced capital and $200 million was spent on foreign-produced capital. All else equal, these transactions contribute _______ to GDP.
A) $0
B) $200 million
C) $300 million
D) $500 million
E) $800 million
Answer: C
Topic: Total expenditure
Skill: Level 3: Using models
Section: Checkpoint 5.1
Status: New
AACSB: Analytical thinking
56) Undistributed profits ______ counted as part of GDP because ______.
   A) are not; households are not paid by the firms
   B) are; they can be used to buy other goods
   C) are; they are considered income paid to households and loaned back to firms
   D) are not; they are considered an intermediate good
   E) are; firms are required to pay corporate income taxes on them

Answer: C

57) Total expenditure equals total income
   A) because firms pay out everything they receive as income to the factors of production.
   B) if firms earn zero profit.
   C) if firms do not save for future investment.
   D) only if firms sell all the goods they produce in a given time period.
   E) only if net taxes equals government expenditures on goods and services.

Answer: A

58) The circular flow shows that GDP measures
   i. total income.
   ii. total expenditures.
   iii. price changes.
   A) i only
   B) ii only
   C) iii only
   D) i and ii
   E) i, ii, and iii

Answer: D
59) Because of the circular flows of expenditure and income in the economy, total ______ equals total ______ equals total ______.
A) expenditure; investment; income
B) expenditure; income; value of production
C) consumption; expenditure; value of production
D) investment; income; consumption
E) consumption; investment; expenditure
Answer: B

60) In the circular flow, how are the "value of production," "income," and "expenditures" related?
A) They have no relationship to each other.
B) Once tax payments are subtracted at each stage, they are equal.
C) Expenditures on GDP equals the value of production which equals income.
D) Once net exports of goods and services are subtracted from GDP, all three are equal.
E) Value of production always equals income but expenditures is smaller because households save some of their income and do not spend it.
Answer: C

61) In a circular flow diagram,
   i. the value of production = income.
   ii. the value of production = expenditure.
   iii. expenditure = income.
A) i, ii and iii are true statements.
B) Only iii is a true statement.
C) i and ii are true statements.
D) i and iii are true statements.
E) Only i is a true statement.
Answer: A
62) The abbreviation “GDP” stands for
   A) Gross Domestic Product.
   B) Gross Domestic Prices.
   C) General Domestic Prices.
   D) Great Domestic Prices.
   E) Government’s Domestic Politics.
Answer: A
Topic: GDP
Skill: Level 1: Definition
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking

63) GDP is equal to the _______ value of all the final goods and services produced within a
country in a given period of time.
   A) production
   B) market
   C) wholesale
   D) retail
   E) typical
Answer: B
Topic: GDP
Skill: Level 1: Definition
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking

64) The following are all final goods EXCEPT
   A) flour used by the baker to make cupcakes.
   B) bread eaten by a family for lunch.
   C) pencils used by a 6th grader in class.
   D) Nike shoes used by a basketball player.
   E) a computer used by Intel to design new computer chips.
Answer: A
Topic: GDP, final goods and services
Skill: Level 2: Using definitions
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking
65) Which of the following is directly included in the U.S. GDP for 2013?
   i. a 2013 Cadillac Escalade produced and sold as a new car in the United States in 2031
   ii. tires produced in the United States, purchased by General Motors, and installed on a new
       Cadillac Escalade sold in 2013
   iii. General Motors cars produced in Canada because General Motors is an American
        corporation

A) i only  
B) ii only  
C) i and iii  
D) ii and iii  
E) i, ii, and iii

Answer: A  

66) Production by Honda, a Japanese firm, in the United States is included in _______ GDP and
    production by Nike Corporation, a U.S. firm, in Vietnam is included in _______ GDP.

A) Japanese; U.S.  
B) U.S.; Vietnamese  
C) U.S.; U.S.  
D) Japanese; Vietnamese  
E) U.S. and Japanese; U.S. and Vietnamese

Answer: B  

67) Investment is defined as

A) the purchase of a stock or bond.  
B) financial capital.  
C) what consumers do with their savings.  
D) the purchase of new capital goods by firms.  
E) spending on capital goods by governments.

Answer: D  

68) In one year, a firm increases its production by $9 million and increases sales by $8 million. All other things in the economy remaining the same, which of the following is true?
   A) GDP increases by $8 million and inventory investment decreases by $1 million.
   B) GDP increases by $9 million and inventory investment increases by $1 million.
   C) Inventory investment decreases by $1 million.
   D) GDP increases by $8 million and investment increases by $1 million.
   E) GDP increases by $17 million.

   Answer: B

   Topic: Investment, inventory
   Skill: Level 3: Using models
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking

69) Net exports of goods and services increase when
   A) exports of goods and services decrease and imports of goods and services do not change.
   B) consumption expenditure increases.
   C) exports of goods and services increase and imports of goods and services do not change.
   D) consumption expenditure decreases.
   E) imports of goods and services increase and exports of goods and services do not change.

   Answer: C

   Topic: Net exports of goods and services
   Skill: Level 1: Definition
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking

70) Total expenditure equals
   A) C + I + G + NX.
   B) C + I + G - NX.
   C) C + I - G + NX.
   D) C - I + G + NX.
   E) C - I - G - NX.

   Answer: A

   Topic: Total expenditure
   Skill: Level 1: Definition
   Section: Checkpoint 5.1
   Status: Old
   AACSB: Reflective thinking
71) Total income in a country in 2012 is $780 billion. Total expenditure in the country
   A) cannot be determined.
   B) is greater than $780 billion.
   C) is $780 billion.
   D) is less than $780 billion.
   E) is either less than or equal to $780 billion.

Answer: C

Topic: Total expenditure
Skill: Level 1: Definition
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking

72) Total expenditure in the United States is equal to consumption expenditure plus investment
   A) plus government expenditure on goods and services plus imports of goods and services.
   B) minus government expenditure on goods and services minus imports of goods and services.
   C) plus government expenditure on goods and services plus exports of goods and services.
   D) plus government expenditure on goods and services plus exports of goods and services minus imports of goods and services.
   E) plus government expenditure on goods and services plus exports of goods and services plus imports of goods and services.

Answer: D

Topic: Total expenditure
Skill: Level 2: Using definitions
Section: Checkpoint 5.1
Status: Old
AACSB: Reflective thinking

5.2 Measuring U.S. GDP

1) In order to measure gross domestic product, we can follow
   A) only one approach: the circular flow approach.
   B) only one approach: the national accounts approach.
   C) two approaches: the expenditure approach and the income approach.
   D) three approaches: the expenditure approach, the income approach, and the production approach.
   E) three approaches: the expenditure approach, the income approach, and the market-based approach.

Answer: C

Topic: Measuring GDP
Skill: Level 1: Definition
Section: Checkpoint 5.2
Status: Old
AACSB: Reflective thinking
2) In 2011, U.S. GDP was
   A) $15 trillion using the expenditure approach.
   B) $15 trillion using the income approach.
   C) $15 trillion using the expenditure approach and $14 trillion using the income approach.
   D) $16 trillion using the income approach and $14 trillion using the expenditure approach.
   E) both A and B are correct.

Answer: E

Topic: Measuring GDP
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACSB: Reflective thinking

3) The expenditure approach to measuring GDP is done by using data on only
   A) consumption expenditure.
   B) consumption expenditure and investment.
   C) consumption expenditure, investment, government expenditure on goods and services, and net exports of goods and services.
   D) consumption expenditure, investment, and government expenditures.
   E) wages, rent, interest, and profit.

Answer: C

Topic: Expenditure approach
Skill: Level 1: Definition
Section: Checkpoint 5.2
Status: Old
AACSB: Reflective thinking

4) In comparing the magnitudes of the components of GDP according to the expenditure approach, we see that in the United States
   A) government expenditure on goods and services is the largest category.
   B) investment is the largest category.
   C) investment is much larger than government expenditure on goods and services.
   D) investment is less than government expenditure on goods and services.
   E) investment, government expenditure on goods and services, and consumption expenditure are all about the same size.

Answer: D

Topic: Expenditure approach
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACSB: Reflective thinking
5) The largest expenditure category in the United States is
   A) consumption expenditure.
   B) investment.
   C) government expenditure on goods and services.
   D) net exports of goods and services.
   E) wages.
Answer: A
   Topic: Expenditure approach
   Skill: Level 1: Definition
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Reflective thinking

6) If consumption was 70 percent of GDP and investment and government expenditure were both 18 percent each, then we see that
   A) GDP can be over 100 percent because it is "gross" rather than "net."
   B) the error is due to rounding.
   C) exports must be less than imports.
   D) exports must be more than imports.
   E) we must subtract depreciation from investment so that the components of GDP do not exceed 100 percent.
Answer: C
   Topic: Expenditure approach
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Reflective thinking

7) In recent years, which of the following has been negative?
   A) consumption expenditure
   B) investment
   C) government expenditure on goods and services
   D) net exports of goods and services
   E) wages
Answer: D
   Topic: Expenditure approach
   Skill: Level 1: Definition
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Reflective thinking
8) In 2009 in the United States, consumption expenditure was $9,996 billion, investment was $1,559 billion, government expenditures on goods and services were $2,927 billion, and total exports were $1,492 billion. GDP equaled
   A) $12,641 billion.
   B) $10,120 billion.
   C) $11,488 billion.
   D) $14,415 billion.
   E) some amount, but there is not enough information given to calculate GDP.
Answer: E

9) The following table reports transactions that occurred in Whoville. Nominal GDP in Whoville is ________.

<table>
<thead>
<tr>
<th>Item</th>
<th>Price per Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottles of French Wine</td>
<td>$20</td>
<td>10</td>
</tr>
<tr>
<td>Boxes of Cereal</td>
<td>$4</td>
<td>20</td>
</tr>
<tr>
<td>Used Tires</td>
<td>$15</td>
<td>5</td>
</tr>
<tr>
<td>Shares of Twitter Stock</td>
<td>$10</td>
<td>15</td>
</tr>
<tr>
<td>Hours of Swimming Lessons</td>
<td>$5</td>
<td>8</td>
</tr>
</tbody>
</table>

A) $320  B) $545  C) $120  D) $395  E) $195
Answer: C

10) Based on the data in the table above, what does GDP equal?
   A) $10,200 billion
   B) $10,400 billion
   C) $10,000 billion
   D) $9,800 billion
   E) $8,900 billion
Answer: C
<table>
<thead>
<tr>
<th>Item</th>
<th>Billions of dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption expenditure</td>
<td>4,000</td>
</tr>
<tr>
<td>Interest, rent, and profit</td>
<td>300</td>
</tr>
<tr>
<td>Investment</td>
<td>1,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>400</td>
</tr>
<tr>
<td>Government expenditure on goods and services</td>
<td>1,000</td>
</tr>
<tr>
<td>Net exports of goods and services</td>
<td>200</td>
</tr>
</tbody>
</table>

11) The table gives data for a nation. What is the amount of the country’s GDP?
   A) $6,000 billion
   B) $6,200 billion
   C) $6,600 billion
   D) $6,900 billion
   E) $5,800 billion

Answer: B

12) The table gives data for a nation. The value of the country’s net exports of goods and services shows that the country’s
   A) value of its exports exceeded the value of its imports.
   B) value of its imports are negative.
   C) net exports of goods and services are decreasing.
   D) value of its imports exceeded the value of its exports.
   E) value of its imports must equal zero.

Answer: A

13) The value of used goods ______ counted as part of GDP ______.
    A) are; as long as they are classified as consumption goods
    B) are; as long as they are classified as investment goods
    C) are not; because they were counted during the period when they were counted as new goods
    D) are not; because most fall in value and would cause a decrease in the value of GDP
    E) may be; as long as their value has risen

Answer: C
14) If the purchase of used goods was to be incorporated into measuring GDP using the expenditure approach, then
   A) we also will have to account for spending on financial assets.
   B) it will be very difficult to assign a fair market value to a used good.
   C) we will be counting the value of the used goods both at the time of their production and at the time of their re-sale.
   D) we will have to account for the natural depreciation that a used good experiences.
   E) consumption spending would need to be adjusted for depreciation.

Answer: C  
Topic: Expenditures not in GDP, used goods  
Skill: Level 2: Using definitions  
Section: Checkpoint 5.2  
Status: Old  
AACSB: Reflective thinking

15) When calculating GDP, purchases of used goods are
   A) included at the original price.
   B) included by taking the original price and subtracting the (current) used price.
   C) included at the (current) used price.
   D) not included.
   E) included at the original price minus any depreciation.

Answer: D  
Topic: Expenditures not in GDP, used goods  
Skill: Level 2: Using definitions  
Section: Checkpoint 5.2  
Status: Old  
AACSB: Reflective thinking

16) If you buy a five-year-old TV from a friend, the amount you paid for the TV is
   A) always added to consumption expenditures but not investment.
   B) always added to investment but not consumption.
   C) not included in this year’s GDP.
   D) added to investment if the TV is expected to last more than 5 additional years and added to consumption if the TV is expected to last less than 5 additional years.
   E) included in this year’s GDP only if the TV set was manufactured in the United States.

Answer: C  
Topic: Expenditures not in GDP, used goods  
Skill: Level 2: Using definitions  
Section: Checkpoint 5.2  
Status: Old  
AACSB: Reflective thinking
17) When Jamie purchases a classic 1968 Plymouth Cuda convertible from Shane, GDP
A) does not change, because the car was not produced this year.
B) increases, because the car is a durable good and increases consumption.
C) increases, because the car is a durable good and increases investment.
D) does not change, because Jamie did not buy the car from a dealership.
E) increases, because this expenditure decreases saving.

Answer: A
Topic: Expenditures not in GDP, used goods
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACS: Reflective thinking

18) Spending on financial assets ________ counted as part of GDP ________.
A) are; because the cash exchanged represents an expenditure
B) are not; because their purchase is not spending on goods or services
C) are; as long as their purchase produces income
D) are not; because interest must be paid on them
E) may be; as long as their value increases

Answer: B
Topic: Expenditures not in GDP, financial assets
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACS: Reflective thinking

19) The purchase of 500 shares of Honda stock by the California State Employees’ Pension fund
A) is counted as consumption expenditure.
B) is not counted as part of GDP.
C) is counted as investment in the GDP accounts.
D) is counted as part of export expenditure in the GDP accounts because Honda is a foreign firm.
E) is counted as part of import expenditure in the GDP accounts because Honda is a foreign firm.

Answer: B
Topic: Expenditures not in GDP, financial assets
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACS: Reflective thinking
20) Recently, the government made adjustments to how GDP is calculated that included placing software purchases into the category of
   A) intermediate goods because software is not a final good.
   B) inventory and now software purchases are not directly counted as part of GDP.
   C) investment and now directly counts software purchases as part of GDP.
   D) net exports of goods and services because most software is written abroad.
   E) net operating surplus.
Answer: C
Topic: Eye on the U.S. economy, is a computer program an intermediate good?
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACS B: Reflective thinking

21) Which of the following is true regarding the measurement of GDP?
   A) Wages and profit income are used in the income approach to GDP.
   B) Wages and consumption are used in the expenditure approach to GDP.
   C) Consumption and investment are used in the income approach to GDP.
   D) Government expenditure is only counted in the income approach to GDP.
   E) Investment and wages are expenditures, and are therefore are used in the expenditure approach to GDP.
Answer: A
Topic: Income approach
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACS B: Reflective thinking

22) The income approach measures GDP by summing
   A) C + I + G + NX.
   B) the total production of all final goods and services produced in a year within a country’s borders.
   C) the wealth of households, business and government.
   D) the incomes paid households for the resources they own.
   E) Both answers A and D are correct.
Answer: D
Topic: Income approach
Skill: Level 1: Definition
Section: Checkpoint 5.2
Status: Old
AACS B: Reflective thinking
23) The income approach to measuring GDP is based on summing
A) the production of each industry.
B) wages, interest, rent, and profits.
C) the values of final goods, intermediate goods and services, used goods, and financial assets.
D) consumption expenditure, investment, government expenditures on goods and services, and net exports of goods and services.
E) consumption expenditure and wages.

Answer: B

24) According to the income approach to measuring GDP, the largest income category is
A) wages.
B) interest.
C) rent.
D) profits.
E) consumption expenditure.

Answer: A

25) In 2009 in the United States, net domestic product at factor cost was $11,091 billion.
Additionally, rent was $2,000 billion, profits were $1,000 billion, and interest was $358 billion.
Hence wages were
A) $7,733 billion.
B) $9,091 billion.
C) $10,091 billion.
D) $8,091 billion.
E) $12,091 billion.

Answer: A
26) When measuring GDP by the income approach, wage income includes
   i. health-care insurance paid for by the firm for its employees.
   ii. Social Security contributions made by the firm.
   iii. wages paid during a worker's vacation time.
   A) i, ii and iii
   B) i and ii only
   C) i only
   D) ii only
   E) ii and iii only
Answer: A

27) Which of the following are included in interest income?
   i. payments made for the use of land
   ii. income paid to households for loans they make
   iii. payments made by households for their borrowing
   A) i, ii and iii
   B) ii and iii only
   C) i and ii only
   D) ii only
   E) iii only
Answer: B

28) The category of "rent" in the income approach to GDP
   A) includes the money paid to rent apartments only.
   B) includes the money paid to rent machinery only.
   C) includes the money paid to use land and other rented inputs.
   D) does not have any connection to owner-occupied housing.
   E) includes only the imputed rent for owner-occupied housing.
Answer: C
29) Adding wages, interest, rent, and profits yields
   A) gross domestic product.
   B) gross domestic product at factor cost.
   C) net domestic product at factor cost.
   D) GNP.
   E) total expenditure.
Answer: C

Topic: Net domestic product at factor cost
Skill: Level 1: Definition
Section: Checkpoint 5.2
Status: Old
AACSB: Reflective thinking

30) The sum of all the income categories listed in the National Income and Product Accounts adds up to
   A) gross domestic product.
   B) net national product.
   C) disposable income after taxes.
   D) net domestic product at factor cost.
   E) gross national product.
Answer: D

Topic: Net domestic product at factor cost
Skill: Level 1: Definition
Section: Checkpoint 5.2
Status: Old
AACSB: Reflective thinking

31) Once the categories of income are totaled, the sum is called
   A) "GDP measured by the income approach."
   B) "net domestic product at factor cost" and is not equal to GDP.
   C) "net domestic product at factor cost" and is equal to GDP.
   D) "total income earned" and is equal to GDP.
   E) GNP and is not equal to GDP.
Answer: B

Topic: Net domestic product at factor cost
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACSB: Reflective thinking
32) One reason the total sum of the income categories does not equal GDP is that
   A) GDP values goods and services at market prices and the income approach values them at factor cost.
   B) GDP values goods and services at retail prices and the income approach values them at wholesale cost.
   C) taxes are generally larger than subsidies and the depreciation of capital is negligible.
   D) GDP does not include depreciation, which is part of the income categories.
   E) people do not spend all their income, so the value of consumption expenditure is less than the value of wages.

   Answer: A

   Topic: Income approach, adjustments
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.2
   Status: Old
   AACSBI: Reflective thinking

33) After calculating net domestic product at factor cost, to calculate GDP using the income approach, in part we must add
   A) wages.
   B) net operating surplus.
   C) indirect taxes and depreciation.
   D) interest, rent, and profit.
   E) subsidies.

   Answer: C

   Topic: Income approach, adjustments
   Skill: Level 1: Definition
   Section: Checkpoint 5.2
   Status: Old
   AACSBI: Reflective thinking

34) To measure GDP by using the income approach, we must add all incomes and then ________ depreciation and ________ net taxes less subsidies.
   A) neither add nor subtract; add
   B) add; neither add nor subtract
   C) add; add
   D) add; subtract
   E) subtract; add

   Answer: C

   Topic: Income approach, adjustments
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.2
   Status: Old
   AACSBI: Reflective thinking
35) If the statistical discrepancy is zero, in order to calculate GDP from the value of net domestic product at factor cost, we must add
   A) the value of intermediate goods and subtract the value of imports.
   B) direct taxes, subtract corporate profit, and add investment.
   C) indirect taxes, subtract subsidies, and add depreciation.
   D) subsidies, subtract indirect taxes and depreciation.
   E) indirect taxes, subsidies, and depreciation.

Answer: C

Topic: Income approach, adjustments
Skill: Level 1: Definition
Section: Checkpoint 5.2
Status: Old
AACSB: Reflective thinking

36) To calculate GDP using the income approach, one of the adjustments made to net domestic product at factor cost is to
   A) add depreciation.
   B) add investment.
   C) subtract investment.
   D) add consumption expenditure.
   E) subtract indirect taxes less subsidies.

Answer: A

Topic: Income approach, adjustments
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACSB: Reflective thinking

37) Which adjustment(s) must be made to convert net domestic product to GDP?
   i. add indirect taxes
   ii. subtract subsidies
   iii. add depreciation
      A) i and iii only
      B) i, ii and iii
      C) ii only
      D) iii only
      E) i and ii

Answer: B

Topic: Income approach, adjustments
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACSB: Reflective thinking
38) Last year in a nation to the south, net domestic product at factor cost equaled $3,300 billion. Indirect taxes minus subsidies equaled $200 billion, depreciation equaled $800 billion, the statistical discrepancy equaled zero, and net operating surplus equaled $150 billion. The country’s GDP was
   A) $2,300 billion.
   B) $3,500 billion.
   C) $4,300 billion.
   D) $4,450 billion.
   E) $4,150 billion.

Answer: C

Topic: Income approach, adjustments
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACSB: Analytical thinking

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<tr>
<td>Interest, rent, and profit</td>
<td>1,500</td>
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<td>Investment</td>
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<tr>
<td>Statistical discrepancy</td>
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<tr>
<td>Net exports</td>
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<tr>
<td>Depreciation</td>
<td>800</td>
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</tbody>
</table>

39) The table above has information about an economy. Using this information, GDP equals
   A) $6,500 billion.
   B) $7,800 billion.
   C) $7,000 billion.
   D) $8,500 billion.
   E) some amount that cannot be calculated without information on the amount of government expenditures.

Answer: B

Topic: Income approach
Skill: Level 3: Using models
Section: Checkpoint 5.2
Status: Old
AACSB: Analytical thinking
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<tr>
<td>Depreciation</td>
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</tbody>
</table>

40) Using the information in the table above, what does GDP equal?
   A) $365 billion  
   B) $350 billion  
   C) $650 billion  
   D) $380 billion  
   E) GDP cannot be calculated without information on the amount of investment.

Answer: D

41) The expenditure approach values _______ and the income approach values _______.
   A) goods and services at market prices; services at factor prices  
   B) goods and services at market prices; goods and services at factor prices  
   C) only goods at market prices; only services at factor prices  
   D) services only at factor prices; goods only at market prices  
   E) goods and services at factor prices; goods and services at market prices

Answer: B

42) Which of the following would be included in Germany’s GNP?
   A) the production of BMWs (made by a German–based company) in South Carolina  
   B) the production of Michelin tires made in Germany by a French company and then sold directly to French consumers  
   C) the production of BMWs in Germany  
   D) the production of Michelin tires made in France by a French company and then sold to BMW in Germany for use in BMW cars  
   E) Answers A and C are correct.

Answer: E
43) Real GDP measures the value of goods and services produced in a given year valued using
   A) base year prices.
   B) prices that prevail the same year.
   C) no prices.
   D) future prices.
   E) real rather than nominal prices.

   Answer: A
   Topic: Real GDP
   Skill: Level 1: Definition
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Reflective thinking

44) Real GDP is the value of final goods and services produced in a year
   A) expressed in the prices of that same year.
   B) during a recession.
   C) minus depreciation.
   D) expressed in the prices of a base year.
   E) minus the value of all the intermediate goods produced.

   Answer: D
   Topic: Real GDP
   Skill: Level 1: Definition
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Reflective thinking

45) Real GDP can increase if the
   i. quantities of goods and services produced decrease and prices fall by a smaller percentage.
   ii. quantities of goods and services produced decrease and prices fall by a larger percentage.
   iii. quantities of goods and services produced decrease and prices do not change.
   iv. quantities of goods and services produced increase.
      A) i only
      B) iii only
      C) iv only
      D) i and iii
      E) i, ii, and iii

   Answer: C
   Topic: Real GDP
   Skill: Level 1: Definition
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Reflective thinking
46) ________ is most likely to contribute to an improvement in our living standard.
   A) An increase in real GDP
   B) An increase in the price level
   C) A decrease in nominal GDP
   D) An increase in depreciation
   E) An increase in the GDP deflator combined with a decrease in nominal GDP

   Answer: A

47) Nominal GDP measures the value of goods and services produced in a given year valued using
   A) constant prices.
   B) prices of the same year.
   C) no prices.
   D) future prices.
   E) base year prices.

   Answer: B

48) Nominal GDP is GDP
   A) using current market values.
   B) during a recession.
   C) minus depreciation.
   D) after adjusting for any price changes.
   E) that ignores depreciation.

   Answer: A
49) An increase in nominal GDP could result from an increase in
   i. production.
   ii. prices.
   iii. subsidies.
   A) i only
   B) ii only
   C) i and ii
   D) i and iii
   E) i, ii, and iii
Answer: C

50) Nominal GDP increases
   A) only if total production increases.
   B) only if prices increase.
   C) if either prices and/or total production increase.
   D) only if the productivity of resources increase.
   E) only if depreciation decreases.
Answer: C

51) When the value of nominal GDP increases from one year to the next, we know that one or two things must have happened during that time:
   A) The nation produced fewer goods and services and/or prices fell for goods and services.
   B) Consumption expenditure increased and/or corporate profits increased.
   C) Investment increased and/or payments to employees increased.
   D) The nation produced more goods and services and/or prices rose for goods and services.
   E) the value of real GDP must have increased and/or the price level must have decreased.
Answer: D
52) If nominal GDP increases from one year to the next, then
   A) production must have increased.
   B) production could have increased, decreased, or stayed the same.
   C) prices must have increased.
   D) prices and production must both have increased.
   E) prices and production must both have decreased.

   Answer: B
   Topic: Nominal GDP
   Skill: Level 1: Definition
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Reflective thinking

53) Which of the following statement is correct?
   A) If nominal GDP increases, then real GDP must increase.
   B) If nominal GDP decreases, then real GDP must increase.
   C) If real GDP decreases, then nominal GDP must decrease.
   D) Nominal and real GDP can change either in the same direction or the opposite direction.
   E) If nominal GDP does not change, then real GDP cannot change.

   Answer: D
   Topic: Real GDP versus nominal GDP
   Skill: Level 3: Using models
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Reflective thinking

54) If nominal GDP increases this year, then real GDP
   A) must decrease.
   B) must increase.
   C) must not change.
   D) could increase, decrease, or not change.
   E) could either increase or not change but cannot decrease.

   Answer: D
   Topic: Real GDP versus nominal GDP
   Skill: Level 1: Definition
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Reflective thinking
55) Bobby was researching the economic growth of a country between 2006 and 2011. Using 2006 as the base year, he calculated a twelve percent increase for real GDP and a ten percent increase for nominal GDP. His results indicate that
   A) he made an error when calculating nominal GDP.
   B) the quantity of goods and services produced decreased over the period.
   C) the quantity of goods and services produced increased and prices decreased over the period.
   D) the quantity of goods and services produced and prices both decreased over the period.
   E) the quantity of goods and services produced did not change and prices decreased over the period.

   Answer: C
   Topic: Real GDP versus nominal GDP
   Skill: Level 3: Using models
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Analytical thinking

56) If real GDP is greater than nominal GDP for a particular year, then
   A) production must have fallen between the current year and the base year.
   B) production must have increased between the current year and the base year.
   C) prices must have fallen between the current year and the base year.
   D) prices must have risen between the current year and the base year.
   E) prices must have fallen between the current year and the immediate past year.

   Answer: C
   Topic: Real GDP versus nominal GDP
   Skill: Level 3: Using models
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Analytical thinking

57) During last year, a country produced 20,000 pizzas and 10,000 hamburgers and nothing else. The pizzas sold for $10.00 each and the hamburgers for $3.00 each. Nominal GDP was
   A) $230,000.  B) $70,000.  C) $460,000.  D) $390,000.  E) $360,000.

   Answer: A
   Topic: Nominal GDP
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Analytical thinking
58) The base year is 2010. A country only produces MP3 players. The price of an MP3 player in 2008 was $50. The price of an MP3 player was $30 in 2010. The quantity of MP3 players produced in 2008 was 10,000 units and in 2010 was 20,000 units. Nominal GDP in 2010 equals
   A) $1,000,000.
   B) $500,000.
   C) $600,000.
   D) $200,000.
   E) an amount that cannot be determined without information about real GDP in 2010.

Answer: C

59) The base year is 2011. A country only produces Blu-ray players. The price of a Blu-ray player in 2011 was $100. The price of a Blu-ray player was $90 in 2012. The quantity of Blu-ray players produced in 2011 was 10,000 units and in 2012 was 10,500 units. Nominal GDP in 2012 equals
   A) $900,000.
   B) $945,000.
   C) $1,000,000.
   D) $1,050,000.
   E) an amount that cannot be determined without information about nominal GDP in 2008.

Answer: B

60) The base year is 2012. A country only produces Blu-ray players. The price of a Blu-ray player in 2012 was $100. The price of a Blu-ray player was $90 in 2013. The quantity of Blu-ray players produced in 2012 was 10,000 units and in 2013 was 10,500 units. Real GDP in 2012 equals
   A) $900,000.
   B) $945,000.
   C) $1,000,000.
   D) $1,050,000.
   E) an amount that cannot be determined without information about real GDP in 2007.

Answer: C
61) Assume that a small country produces only green peppers and red peppers. Last year, it produced 100 green peppers and 50 red peppers and sold them at prices of $2 per green pepper and $3 per red pepper. This year, it produced 150 green peppers and 60 red peppers and sold them at prices of $2 per green pepper and $4 per red pepper. What is real GDP this year if the base year is last year?

A) $540  B) $400  C) $480  D) $350  E) $890

Answer: C

Topic: Real GDP
Skill: Level 3: Using models
Section: Checkpoint 5.2
Status: New
AACSBl: Analytical thinking

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<tr>
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<td>$4.00</td>
</tr>
<tr>
<td>Soda</td>
<td>50</td>
<td>$5.00</td>
</tr>
</tbody>
</table>

62) The table above gives the production and prices for a small nation that produces only bread and soda. The base year is 2009. What is nominal GDP in 2009?

A) $410  B) $450  C) $900  D) $550  E) $460

Answer: B

Topic: Real GDP
Skill: Level 3: Using models
Section: Checkpoint 5.2
Status: Old
AACSBl: Analytical thinking

63) The table above gives the production and prices for a small nation that produces only bread and soda. The base year is 2010. What is real GDP in 2010?

A) $530  B) $1080  C) $510  D) $210  E) $300

Answer: C

Topic: Real GDP
Skill: Level 3: Using models
Section: Checkpoint 5.2
Status: Old
AACSBl: Analytical thinking

64) When calculating real GDP, the reference base year

A) allows us to account for changes in GNP compared to GDP.
B) always reduces the value of GDP compared to GNP.
C) allows us to calculate the value of the goods and services in terms of prices of that base year.
D) usually increases the value of GNP compared to GDP.
E) allows us to increase the value of goods and services.

Answer: C

Topic: Real GDP
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACSBl: Reflective thinking
65) In calculating GDP, economists
   A) measure total expenditure as the only true measure.
   B) can measure either total expenditure or total income.
   C) measure total income as the only true measure.
   D) measure total income minus total expenditure.
   E) measure total income plus total expenditure.
Answer: B

66) The expenditure approach to measuring GDP is based on summing
   A) wages, interest, rent, and profit.
   B) each industry’s production.
   C) the total values of final goods, intermediate goods and services, used goods, and financial assets.
   D) consumption expenditure, investment, government expenditure on goods and services, and net exports of goods and services.
   E) consumption expenditure, investment, government expenditure on goods and services, and net exports of goods and services minus wages, interest, rent, and profit.
Answer: D

67) Which of the following is NOT included in the expenditure approach to calculating GDP?
   A) government expenditures on goods and services
   B) investment
   C) net exports of goods and services
   D) wages
   E) consumption expenditure
Answer: D
68) Suppose GDP is $10 billion, consumption expenditure is $7 billion, investment is $2 billion, and government expenditure on goods and services is $2 billion. Net exports of goods and services must be
   A) $1 billion.
   B) −$1 billion.
   C) $2 billion.
   D) −$2 billion.
   E) $10 billion.
   Answer: B
   Topic: Expenditure approach
   Skill: Level 3: Using models
   Section: Checkpoint 5.2
   Status: Old
   AACSBo: Analytical thinking

69) According to the expenditure approach to measuring GDP, in the United States, the largest component of GDP is
   A) consumption expenditure.
   B) investment.
   C) government expenditure on goods and services.
   D) net exports of goods and services.
   E) wages.
   Answer: A
   Topic: Expenditure approach
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.2
   Status: Old
   AACSBo: Reflective thinking

70) Expenditures in GDP do not include
   A) used goods or financial assets.
   B) financial assets or investment.
   C) used goods or investment.
   D) investment, stocks, or bonds.
   E) government expenditures on goods and services.
   Answer: A
   Topic: Expenditure approach
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.2
   Status: Old
   AACSBo: Reflective thinking
71) Which of the following is NOT part of the income used in the income approach to measuring GDP?
   A) wages
   B) rent
   C) interest
   D) taxes paid by persons
   E) profit

   Answer: D

   Topic: Income approach
   Skill: Level 1: Definition
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Reflective thinking

72) Which of the following is NOT included in the income approach to calculating GDP?
   A) interest
   B) wages
   C) net exports of goods and services
   D) profits
   E) rent

   Answer: C

   Topic: Income approach
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Reflective thinking

73) The sum of the components of incomes is called
   A) net domestic product at market prices.
   B) gross domestic product at market prices.
   C) gross domestic product at factor cost.
   D) net domestic product at factor cost.
   E) GNP.

   Answer: D

   Topic: Net domestic product at factor cost
   Skill: Level 1: Definition
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Reflective thinking
74) Nominal GDP can change
A) only if prices change.
B) only if the quantities of goods and services change.
C) only if prices increase.
D) if either prices or the quantities of goods and services change.
E) only if prices and the quantities of the goods and services change.

Answer: D

Topic: Nominal GDP
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACSBS: Reflective thinking

75) A south sea island produces only coconuts. In 2012, the price of a coconut is $1 and the quantity produced is 200. In 2013, the price of a coconut is $1.50 and the quantity produced is 250. 2012 is the base year. Real GDP in 2013 is _______.

A) $375  B) $350  C) $200  D) $250  E) $1.50

Answer: D

Topic: Real GDP
Skill: Level 3: Using models
Section: Checkpoint 5.2
Status: Old
AACSBS: Analytical thinking

76) The difference between nominal GDP and real GDP is
A) the indirect taxes used in their calculations.
B) the prices used in their calculations.
C) that nominal GDP includes the depreciation of capital and real GDP does not.
D) that nominal GDP includes net exports of goods and services and real GDP includes net imports.
E) that real GDP includes the depreciation of capital and nominal GDP does not.

Answer: B

Topic: Real GDP versus nominal GDP
Skill: Level 1: Definition
Section: Checkpoint 5.2
Status: Old
AACSBS: Reflective thinking
5.3 The Use and Limitations of Real GDP

1) GDP is
   A) a perfect measure of the standard of living.
   B) a perfect measure of the value of production.
   C) a measure which includes the value of all newly produced goods and services.
   D) an imperfect measure of the standard of living.
   E) the only factor that affects our standard of living.

   Answer: D
   Topic: Standard of living
   Skill: Level 1: Definition
   Section: Checkpoint 5.3
   Status: Old
   AACS: Reflective thinking

2) Even though it is not a perfect measure, economists can use real GDP to
   i. compare how the value of the goods and services produced in China have changed over the past 10 years.
   ii. look at the length of recessions and expansions in the United States.
   iii. compare the standard of living in China versus the standard of living in Vietnam.

   A) ii only
   B) i, ii and iii
   C) i and iii
   D) i and ii
   E) ii and iii

   Answer: B
   Topic: Standard of living
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.3
   Status: Old
   AACS: Reflective thinking

3) Although imperfect, which of the following is used as a measure of the standard of living?
   A) real GDP ÷ population
   B) real GDP × population
   C) nominal GDP × population
   D) nominal GNP ÷ population
   E) nominal GNP × population

   Answer: A
   Topic: Standard of living
   Skill: Level 1: Definition
   Section: Checkpoint 5.3
   Status: Old
   AACS: Reflective thinking
4) In the United States, between 1961 and 2011, there has been
   i. a consistent, non-changing growth rate of potential GDP per person.
   ii. an increase in the standard of living based on real GDP per person.
   iii. fluctuations in real GDP per person around potential GDP per person.
   A) ii only
   B) i, ii and iii
   C) i and ii only
   D) ii and iii
   E) i only
   Answer: D
   Topic: Standard of living
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.3
   Status: Old
   AACSBS: Reflective thinking

5) In 1961, real GDP totaled $575 billion and in 2011 it totaled $1,255 billion. Between 1961 and 2011, the population increased from 50 million to 100 million. Between 1961 and 2011, the standard of living based on real GDP per person
   A) increased from $11,500 to $12,550.
   B) increased by over 300 percent.
   C) increased by about 118 percent.
   D) decreased from $125,500 to $28,750.
   E) decreased by 9 percent.
   Answer: A
   Topic: Real GDP and nominal GDP
   Skill: Level 3: Using models
   Section: Checkpoint 5.3
   Status: Old
   AACSBS: Analytical thinking

6) If we use GDP to measure our standard of living, then our procedure is
   A) inaccurate because our standard of living does not depend only on goods and services.
   B) accurate because our standard of living depends solely on goods and services.
   C) inaccurate because our standard of living has nothing to do with goods and services.
   D) inaccurate because our standard of living only depends on used goods and services.
   E) accurate only if we use nominal GDP rather than real GDP.
   Answer: A
   Topic: Standard of living
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.3
   Status: Old
   AACSBS: Reflective thinking
7) The business cycle describes
   A) the change in potential GDP over time.
   B) the change in the standard of living across countries.
   C) the behavior of real GDP over time.
   D) the behavior of nominal GDP over time.
   E) the behavior of GNP over time.

   Answer: C

   Topic: Business cycle
   Skill: Level 1: Definition
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking

8) The business cycle is defined as
   A) changes in the stock market.
   B) changes in financial markets.
   C) persistent growth in potential GDP.
   D) irregular ups and downs in production and jobs.
   E) the period of time during which the unemployment rate is rising.

   Answer: D

   Topic: Business cycle
   Skill: Level 1: Definition
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking

9) The relationship between real GDP and potential GDP over the business cycle can be best
   summarized by which of the following statements?
   A) Real GDP fluctuates around potential GDP.
   B) Real GDP is always equal to potential GDP.
   C) Real GDP cannot be greater than potential GDP.
   D) Real GDP cannot be less than potential GDP.
   E) Real GDP cannot be equal to potential GDP.

   Answer: A

   Topic: Business cycle
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking
10) Over the business cycle,
   A) potential GDP fluctuates around its trend.
   B) real GDP fluctuates around its trend.
   C) only potential GDP fluctuates around its trend and real GDP remains equal to its trend.
   D) only real GDP fluctuates around its trend and potential GDP remains equal to its trend.
   E) neither real GDP nor potential GDP fluctuates because they just grow smoothly along their trends.

Answer: B

11) During the business cycle,
   A) real GDP fluctuates around nominal GDP.
   B) nominal GDP fluctuates around real GDP.
   C) real GDP fluctuates around its trend.
   D) trend GDP fluctuates around real GDP.
   E) real GDP falls after the trough.

Answer: C

12) A business cycle has two turning points, which are the
   A) recession and trough.
   B) peak and recession.
   C) trough and peak.
   D) expansion and recession.
   E) peak and expansion.

Answer: C
13) The business cycle has two phases,
   A) expansion and peak.
   B) recession and trough.
   C) peak and trough.
   D) recession and expansion.
   E) expansion and trough.
Answer: D

Topic: Business cycle
Skill: Level 1: Definition
Section: Checkpoint 5.3
Status: Old
AACSB: Reflective thinking

14) Based on the figure above, in which quarter or quarters did a recession occur?
   A) between 2012, 2nd quarter to 2013, 2nd quarter
   B) in 2013, 2nd quarter
   C) between 2013, 2nd quarter to 2014, 2nd quarter
   D) between 2014, 1st quarter to 2014 2nd quarter
   E) after 2013, 2nd quarter
Answer: C

Topic: Business cycle
Skill: Level 2: Using definitions
Section: Checkpoint 5.3
Status: Revised
AACSB: Reflective thinking
15) Based on the figure above, in which quarter or quarters did an expansion occur?
   A) between 2012, 2nd quarter to 2013, 2nd quarter and also between 2014, 2nd quarter to the end of the figure
   B) in 2013, 2nd quarter
   C) between 2013, 2nd quarter to 2014, 2nd quarter
   D) in 2014, 2nd quarter
   E) There are no expansions illustrated in the figure.
   Answer: A
   Topic: Business cycle
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking

16) Based on the figure above, in which quarter or quarters did a trough occur?
   A) between 2012, 2nd quarter to 2013, 2nd quarter and also between 2014, 2nd quarter to the end of the figure
   B) in 2013, 2nd quarter
   C) between 2013, 2nd quarter to 2014, 2nd quarter
   D) in 2014, 2nd quarter
   E) There are no troughs illustrated in the figure.
   Answer: D
   Topic: Business cycle
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking

17) Based on the figure above, in which quarter or quarters did a peak occur?
   A) between 2012, 2nd quarter to 2013, 2nd quarter and also between 2014, 2nd quarter to the end of the figure
   B) in 2013, 2nd quarter
   C) between 2013, 2nd quarter to 2014, 2nd quarter
   D) in 2014, 2nd quarter
   E) There are no peaks illustrated in the figure.
   Answer: B
   Topic: Business cycle
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking
18) A standard definition of recession is
   A) a period of expansion in many sectors of the economy.
   B) an increase in GDP that lasts for at least 6 months.
   C) a decrease in GDP that lasts for at least 6 months.
   D) an increase in unemployment from one month to the next.
   E) a period of time when the unemployment rate exceeds 6.5 percent.

Answer: C
Topic: Business cycle, recession
Skill: Level 1: Definition
Section: Checkpoint 5.3
Status: Old
AACS8: Reflective thinking

19) In order to be classified as a recession, a contraction of general economic activity must last at least
   A) one year.
   B) six months.
   C) one period.
   D) one quarter.
   E) None of the above because recessions do not have a minimum length.

Answer: B
Topic: Business cycle, recession
Skill: Level 1: Definition
Section: Checkpoint 5.3
Status: Old
AACS8: Reflective thinking

20) A recession conventionally is defined as a decrease in
   A) real GDP that lasts for at least six months.
   B) the growth rate of real GDP that lasts for at least six months.
   C) potential GDP that lasts for at least six months.
   D) real GDP that lasts for at least three months.
   E) the inflation rate that lasts for at least six months.

Answer: A
Topic: Business cycle, recession
Skill: Level 1: Definition
Section: Checkpoint 5.3
Status: Old
AACS8: Reflective thinking
21) A recession runs from the
   A) peak of the business cycle to its trough.
   B) peak of the business cycle to a recovery.
   C) expansion of a business cycle to its peak.
   D) trough of a business cycle to its peak.
   E) trough of a business cycle to its expansion.

Answer: A

Topic: Business cycle, recession
Skill: Level 1: Definition
Section: Checkpoint 5.3
Status: Old
AACSB: Reflective thinking

22) The U.S. economy is experiencing falling output, falling employment, falling incomes and rising unemployment. These conditions best describe a business cycle _______.
   A) expansion
   B) peak
   C) trend
   D) recession
   E) trough

Answer: D

Topic: Business cycle, recession
Skill: Level 1: Definition
Section: Checkpoint 5.3
Status: Old
AACSB: Reflective thinking

23) The U.S. economy is experiencing rising output, rising employment, rising incomes and falling unemployment. These conditions best describe a business cycle _______.
   A) expansion
   B) peak
   C) trend
   D) recession
   E) trough

Answer: A

Topic: Business cycle, expansion
Skill: Level 1: Definition
Section: Checkpoint 5.3
Status: Old
AACSB: Reflective thinking
24) The NBER describes a recession as
   A) "a period of significant decline in total output, income, employment, and trade, usually lasting from six months to a year."
   B) "a decrease in real GDP for two successive quarters."
   C) "a decrease in potential GDP for at least six months."
   D) "a decrease in the standard of living for at least one year."
   E) "a one year period with increases in the unemployment rate."

Answer: A

Topic: Business cycle, NBER
Skill: Level 1: Definition
Section: Checkpoint 5.3
Status: Old
AACS: Reflective thinking

25) The Great Moderation describes the period
   A) of relatively steady growth in real GDP between 1991 and 2008.
   B) of relatively steady growth in real GDP after the year 2000.
   C) between 2000 and 2008 when potential GDP did not increase.
   D) between 1990 and 2005 when real GDP grew significantly more slowly than did potential GDP.
   E) of very slow growth in real GDP after 1990.

Answer: A

Topic: Business cycle, history
Skill: Level 1: Definition
Section: Checkpoint 5.3
Status: Old
AACS: Reflective thinking

26) Which of the following describe the United States economy in 2008 and the start of 2009?
   A) The economy was in an expansion.
   B) The economy was in a recession.
   C) Real GDP per person increased.
   D) Real GDP reached a peak.
   E) None of the above answers is correct.

Answer: B

Topic: Business cycle, recession
Skill: Level 1: Definition
Section: Checkpoint 5.3
Status: Old
AACS: Reflective thinking
27) U.S. real GDP
   A) precisely measures the improving standard of living in the United States.
   B) measures the change in the price level over time.
   C) excludes the value of underground production and leisure time.
   D) is not as accurate as nominal GDP when measuring standard of living changes over time.
   E) includes the value of underground production but excludes the value of leisure time.

   Answer: C

   Topic: Omissions from GDP
   Skill: Level 1: Definition
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking

28) As measured, GDP omits which of the following?
   i. Illegal sales of goods and services
   ii. Changes in the amount of leisure time
   iii. Household production of goods and services

   A) i only
   B) i and ii
   C) ii and iii
   D) i and iii
   E) i, ii, and iii

   Answer: E

   Topic: Omissions from GDP
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking

29) Excluding household and underground production leads to
   A) underestimation of real GDP but not nominal GDP.
   B) overestimation of real GDP but not nominal GDP.
   C) overestimation of both real GDP and nominal GDP.
   D) underestimation of both real GDP and nominal GDP.
   E) underestimation of real GDP an overestimation of nominal GDP.

   Answer: D

   Topic: Omissions from GDP
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking
30) Goods and services such as environmental quality, leisure time, and household production are not included in GDP because they are not
   A) productive activities.
   B) for consumption.
   C) bought in markets.
   D) made for profit.
   E) really durable goods.
Answer: C

Topic: Omissions from GDP
Skill: Level 1: Definition
Section: Checkpoint 5.3
Status: Old
AACSBB: Reflective thinking

31) Household production, such as baking bread at home, is not included in GDP because it
   A) has better quality than the bread in the store.
   B) has lower quality than the bread in the store.
   C) does not add anything of value to GDP.
   D) does not involve a market transaction.
   E) is not really production.
Answer: D

Topic: Household production
Skill: Level 1: Definition
Section: Checkpoint 5.3
Status: Old
AACSBB: Reflective thinking

32) The calculation of GDP excludes the value of
   A) government expenditure on office supplies.
   B) households' purchases of shampoo.
   C) businesses' purchase of new machine tools.
   D) a family member painting the family home.
   E) expenditure on durable goods.
Answer: D

Topic: Household production
Skill: Level 2: Using definitions
Section: Checkpoint 5.3
Status: Old
AACSBB: Reflective thinking
33) An example of household production excluded from GDP is
   A) household cleaning services provided by Merry Maids Incorporated.
   B) child care provided by a certified nanny.
   C) tree trimming you provide at your parents' home.
   D) plumbing work completed by Joe Fix-it.
   E) lawn care provided by a local lawn care company.

   Answer: C
   Topic: Household production
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.3
   Status: Old
   AACS: Reflective thinking

34) Babysitting services the oldest son provides his parents
   A) counts as nominal GDP but not real GDP.
   B) counts as real GDP but not nominal GDP.
   C) counts as real GDP and nominal GDP.
   D) does not count as real GDP nor nominal GDP.
   E) counts in both real and nominal GDP only if the son is not paid.

   Answer: D
   Topic: Household production
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.3
   Status: Old
   AACS: Reflective thinking

35) As more women decide to work outside the home and therefore hire others to work around
    their home, GDP will increase by
    A) only the value of the output produced by the newly working women.
    B) the value of the output produced by the newly working women minus the value of the
       household work they were previously performing.
    C) the value of the output produced by the newly working women plus the value of any
       household work they are now hiring someone to perform.
    D) only the value of the household work they are now hiring someone to perform.
    E) the value of the household work they were previously performing minus the value of the
       output produced by the newly working women.

   Answer: C
   Topic: Household production
   Skill: Level 1: Definition
   Section: Checkpoint 5.3
   Status: Old
   AACS: Reflective thinking
36) Instead of taking the dirty laundry with you when you go back to visit your parents, you use a Laundromat. Your use of the Laundromat means that
   A) GDP will decrease and the country’s standard of living will fall.
   B) your parents’ contribution to GDP will increase.
   C) GDP will remain the same.
   D) what you paid for use of the Laundromat will be included in GDP.
   E) real GDP does not change because the clothes are still being laundered but nominal GDP rises since you are now paying for the service.

Answer: D

Topic: Household production
Skill: Level 2: Using definitions
Section: Checkpoint 5.3
Status: Old
AACS: Reflective thinking

37) If you mow the lawn yourself, the lawn mowing is considered household production. If you pay Larry’s Lawn Service to mow your lawn, the lawn mowing is considered
   A) a leisure time activity.
   B) a service, that will be counted as part of GDP.
   C) a service, but is not counted as part of GDP because it simply replaces a service you used to perform.
   D) rent, and therefore is counted as part of GDP.
   E) underground production because it replaces the underground production of you mowing your lawn.

Answer: B

Topic: Household production
Skill: Level 2: Using definitions
Section: Checkpoint 5.3
Status: Old
AACS: Reflective thinking

38) Pat gives up a $40,000 per year job to stay at home and take care of the house. By so doing, Pat saves $15,000 in child care and house cleaning services which he now performs himself. The direct effect on GDP from Pat’s decision is a decrease of
   A) $40,000.     B) $55,000.     C) $25,000.     D) $15,000.     E) $30,000.

Answer: B

Topic: Household production
Skill: Level 2: Using definitions
Section: Checkpoint 5.3
Status: Old
AACS: Analytical thinking
39) Which of the following is likely to be an unreported economic activity?
   A) a $250,000 bonus paid to the CEO of a company
   B) tips paid to a taxi driver
   C) the minimum wage paid to a teenager working at a McDonald’s
   D) the brokerage fees paid to a broker at Merrill Lynch
   E) the purchase of shares of stock in Walgreen’s Pharmacy

   Answer: B
   Topic: Underground production
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking

40) The measurement of GDP handles underground production by
   A) including the amount produced in this sector of the economy in exactly the same way
      that all other production is included.
   B) omitting it because underground production is unreported to the government by the
      people involved.
   C) adding it at fixed prices that change only infrequently.
   D) adding an estimate of it because it is difficult to precisely measure underground
      production.
   E) omitting it because, being illegal, it has no effect on the nation’s total production.

   Answer: B
   Topic: Underground production
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking

41) Leisure time is ignored when calculating GDP because leisure time
   A) does not affect our standard of living.
   B) has been declining over time.
   C) is not an economic good.
   D) is not bought in a market.
   E) is not productive.

   Answer: D
   Topic: Leisure time
   Skill: Level 1: Definition
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking
42) Which of the following is NOT included in measured U.S. GDP?
   A) the value of the pizzas produced at Pizza Hut in Kansas City
   B) the value of leisure time
   C) the value of the goods produced at a French owned plant in Atlanta, Georgia
   D) the value of the services produced by a lawyer in Tampa, Florida
   E) the value of a plane produced by Boeing in Washington and sold to Air France

Answer: B

Topic: Leisure
Skill: Level 2: Using definitions
Section: Checkpoint 5.3
Status: Old
AACS: Reflective thinking

43) Which of the following is directly accounted for in the calculation of GDP?
   A) the value of one hour of leisure as measured by the hourly wage one would otherwise earn by working
   B) the value of repairing your own kitchen sink as measured by the average rates charged by local plumbers
   C) cash earnings from an illegal poker game
   D) improvements in quality of life from the reduction of pollution
   E) None of the above items is accounted for in GDP.

Answer: E

Topic: Household production
Skill: Level 2: Using definitions
Section: Checkpoint 5.3
Status: New
AACS: Reflective thinking

44) Mexico City is notorious for its excessive pollution. Mexico’s measure of GDP is
   A) decreased by the estimated value of the pollution’s harm.
   B) not affected by the estimated value of the pollution’s harm.
   C) increased by the estimated value of the pollution’s harm.
   D) changed by the pollution only when comparing its GDP with the U.S. GDP.
   E) None of the above answers is correct.

Answer: B

Topic: Environmental quality
Skill: Level 2: Using definitions
Section: Checkpoint 5.3
Status: Old
AACS: Reflective thinking
45) A new technology is discovered which results in all new cars producing 50 percent less pollution. Which of the following is true?
   A) GDP will increase to reflect the fact that the air we breathe is cleaner.
   B) GDP will increase if there is an increase in the production cost and price of the car.
   C) GDP increases anytime pollution is reduced.
   D) GDP will decrease.
   E) Real GDP increases because the air is cleaner, but nominal GDP does not change since air is free.

Answer: B

Topic: Environmental quality
Skill: Level 2: Using definitions
Section: Checkpoint 5.3
Status: Old
AACSB: Reflective thinking

46) The calculation of GDP using the income approach **EXCLUDES**
   A) rent.
   B) interest.
   C) environment quality.
   D) wages.
   E) profit.

Answer: C

Topic: Environmental quality
Skill: Level 3: Using models
Section: Checkpoint 5.3
Status: Old
AACSB: Reflective thinking

47) The Human Development Index was proposed because
   A) people confuse nominal GDP and real GDP.
   B) nominal GDP and real GDP are subjective measures.
   C) of the limitations of real GDP as a measure comparing the standard of living in different nations.
   D) the GDP deflator changes if the base year is changed.
   E) different nations have different populations.

Answer: C

Topic: Eye on the global economy, which country has the highest standard of living?
Skill: Level 2: Using definitions
Section: Checkpoint 5.3
Status: Old
AACSB: Reflective thinking
48) In the years after 1998, the most severe recession occurred during
   A) 1998.
   E) 2005.
   Answer: C
   Topic: Business cycle
   Skill: Level 1: Definition
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking

49) Which of the following is NOT part of the business cycle?
   A) recession
   B) peak
   C) inflation
   D) trough
   E) expansion
   Answer: C
   Topic: Business cycle
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking

50) In the business cycle, what immediately precedes the time when real GDP is falling?
   A) recession
   B) peak
   C) depression
   D) trough
   E) expansion
   Answer: B
   Topic: Business cycle
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking

51) Which of the following goods and services are omitted from GDP?
   A) household production
   B) capital goods
   C) expenditure on resources used to protect the environment
   D) government weather satellites
   E) services such as hair styling
   Answer: A
   Topic: Household production
   Skill: Level 1: Definition
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Reflective thinking
52) GDP handles household production by
   A) estimating a dollar value of the goods purchased to do housework.
   B) estimating a dollar value of the services provided.
   C) ignoring it.
   D) including it in exactly the same way that all other production is included.
   E) including it in real GDP but not in nominal GDP because there are no prices paid for the work.
   Answer: C

Topic: Household production
Skill: Level 2: Using definitions
Section: Checkpoint 5.3
Status: Old
AACSB: Reflective thinking

53) The underground economy
   A) is measured by government officials through tax returns.
   B) is difficult to describe but easy to measure.
   C) includes production that uses illegal workers who are paid less than minimum wage.
   D) includes mining production.
   E) is estimated by the government and the estimate is part of official GDP.
   Answer: C

Topic: Underground production
Skill: Level 1: Definition
Section: Checkpoint 5.3
Status: Old
AACSB: Reflective thinking

54) You hire some of your friends to help you move to a new house. You pay them a total of $200 and buy them dinner at Pizza Hut. Which of the following is true?
   A) The $200 should be counted as part of GDP but not the dinner at Pizza Hut.
   B) If your friends do not report the $200 on their tax forms, it becomes part of the underground economy.
   C) The dinner at Pizza Hut should be counted as part of GDP, but not the $200.
   D) Hiring your friends is an illegal activity and should not be counted in GDP.
   E) Neither the $200 nor the dinner should be counted in GDP because both are household production.
   Answer: B

Topic: Underground production
Skill: Level 2: Using definitions
Section: Checkpoint 5.3
Status: Old
AACSB: Reflective thinking
55) The value of leisure time is
   A) included in GDP and, in recent years, has become an increasing large part of GDP.
   B) excluded from GDP.
   C) zero.
   D) directly included in GDP but, in recent years, has become a decreasing large part of GDP.
   E) directly included in GDP and, in recent years, has not changed much as a fraction of GDP.

   Answer: B

56) Leisure time
   A) is less valuable to us than the wage we earn for working.
   B) has steadily decreased over the years.
   C) is not valued as part of GDP.
   D) is not an economic good.
   E) is included in GDP and has become an increasingly large part of GDP.

   Answer: C

57) When industrial activity increases,
   A) GDP decreases because of pollution.
   B) pollution does not necessarily increase.
   C) health and life expectancy decrease.
   D) and real GDP increases, it is the case that in all nations fewer resources are devoted to protecting the environment.
   E) the increase in real GDP is partially offset by the increase in pollution.

   Answer: B
58) A new technology is discovered that results in all new cars producing 50 percent less pollution. The technology costs nothing to produce and cars do not change in price. As a result of the technology, there is a reduction in the number of visits people make to the doctor to complain of breathing difficulties. Which of the following is true?
   A) Real GDP decreases as a result of fewer doctor services being provided.
   B) Real GDP is not affected.
   C) Nominal GDP increases to reflect the improvement in the health of the population.
   D) Real GDP decreases to reflect the decrease in pollution.
   E) Nominal GDP does not change and real GDP increases.

Answer: A

Topic: Environmental quality
Skill: Level 2: Using definitions
Section: Checkpoint 5.3
Status: Old
AACSBB: Reflective thinking

59) A country with a real GDP per person similar to real GDP per person in the United States but with limited political freedom is generally considered to have
   A) a lower standard of living than the United States.
   B) a larger Human Development Index because the other country still needs to develop more political freedom.
   C) the same standard of living as the United States.
   D) an understated GDP.
   E) an overstated nominal GDP.

Answer: A

Topic: Political freedom
Skill: Level 2: Using definitions
Section: Checkpoint 5.3
Status: Old
AACSBB: Reflective thinking

5.4 Appendix: Measuring Real GDP

1) Using the chained-dollar method to calculate real GDP, real GDP is calculated by
   A) valuing the current output at last year’s real GDP prices.
   B) valuing the current output at current year prices.
   C) averaging the growth of output from one year to the next when the growth rates are calculated using this year’s prices and using last year’s prices.
   D) either A or C, depending which gives the larger value for real GDP.
   E) averaging the value of current output valued using base year prices and current output valued using current year prices.

Answer: C

Topic: Real GDP
Skill: Level 2: Using definitions
Section: Chapter 5 Appendix
Status: Old
AACSBB: Reflective thinking
2) Janet calculated the GDP growth rates for France between 2012 and 2013. Using 2012 prices for both years, GDP increased 5 percent. Using 2013 prices for both years, GDP increased 1 percent. Hence the chained-price method will calculate that between these years, real GDP increased by
   A) 1 percent.  B) 3 percent.  C) 5 percent.  D) 6 percent.  E) 4 percent.

Answer: B

Topic: Real GDP
Skill: Level 3: Using models
Section: Chapter 5 Appendix
Status: Old
AACSB: Analytical thinking

<table>
<thead>
<tr>
<th>Data for 2012 (billions of dollars)</th>
<th>Data for 2013 (billions of dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal GDP</td>
<td>4,000</td>
</tr>
<tr>
<td>GDP using 2010 prices</td>
<td>4,000</td>
</tr>
<tr>
<td>GDP using 2011 prices</td>
<td>4,230</td>
</tr>
</tbody>
</table>

3) The table above gives some data about GDP in a country for two years. Using these the chained-dollar method for calculating real GDP, real GDP increased by ______ percent between these two years.
   A) 4  B) 5  C) 6  D) 10  E) 2

Answer: B

Topic: Real GDP
Skill: Level 4: Applying models
Section: Chapter 5 Appendix
Status: Old
AACSB: Analytical thinking

<table>
<thead>
<tr>
<th>Date for 2012</th>
<th>Data for 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item</strong></td>
<td><strong>Quantity</strong></td>
</tr>
<tr>
<td>Bananas</td>
<td>100</td>
</tr>
<tr>
<td>Sunscreen</td>
<td>60</td>
</tr>
</tbody>
</table>

4) Bananaland produces only bananas and sunscreen and the quantities and prices for 2012 and 2013 are given in the table above. The base year is 2012. Nominal GDP in 2012 is equal to

Answer: A

Topic: Nominal GDP
Skill: Level 3: Using models
Section: Chapter 5 Appendix
Status: Old
AACSB: Analytical thinking
5) Bananaland produces only bananas and sunscreen and the quantities and prices for 2012 and 2013 are given in the table above. The base year is 2012. Nominal GDP in 2013 is equal to
   Answer: B
   Topic: Nominal GDP
   Skill: Level 3: Using models
   Section: Chapter 5 Appendix
   Status: Old
   AACSBS: Analytical thinking

6) Bananaland produces only bananas and sunscreen and the quantities and prices for 2012 and 2013 are given in the table above. The base year is 2012. Real GDP in 2012 is equal to
   Answer: D
   Topic: Real GDP
   Skill: Level 3: Using models
   Section: Chapter 5 Appendix
   Status: Old
   AACSBS: Analytical thinking

7) Bananaland produces only bananas and sunscreen and the quantities and prices for 2012 and 2013 are given in the table above. Between 2012 and 2013, which grew more rapidly, nominal GDP or real GDP?
   A) Nominal GDP grew more rapidly.
   B) Real GDP grew more rapidly.
   C) Both grew at the same rate.
   D) Because real GDP and nominal GDP use different prices, it is not possible to determine which grew most rapidly.
   E) More information is needed to determine which grew more rapidly.
   Answer: A
   Topic: Real GDP
   Skill: Level 3: Using models
   Section: Chapter 5 Appendix
   Status: Old
   AACSBS: Analytical thinking

8) Bananaland produces only bananas and sunscreen and the quantities and prices for 2012 and 2013 are given in the table above. The base year is 2012. In 2013, which is larger, nominal GDP or real GDP?
   A) Nominal GDP is larger.
   B) Real GDP is larger.
   C) Both are the same size.
   D) The answer is ambiguous.
   E) More information is needed to determine which is larger.
   Answer: A
   Topic: Real GDP
   Skill: Level 3: Using models
   Section: Chapter 5 Appendix
   Status: Old
   AACSBS: Analytical thinking
9) Real GDP measures the value of goods and services produced in a given year using
   A) base year prices.
   B) prices of that same year.
   C) no prices.
   D) future prices.
   E) government approved prices.
   Answer: A

   Topic: Real GDP
   Skill: Level 1: Definition
   Section: Chapter 5 Appendix
   Status: Old
   AACS: Reflective thinking

10) In a small country, using prices of 2012, GDP in 2012 was $100 and GDP in 2013 was $110.
    Using prices of 2013, GDP in 2012 was $200 and GDP in 2013 was $210. The country's BEA will
calculate ______ percent as the growth in real GDP between those years.
   A) 10
   B) 5
   C) 15
   D) 7.5
   E) None of the above answers is correct.
   Answer: D

   Topic: Real GDP
   Skill: Level 3: Using models
   Section: Chapter 5 Appendix
   Status: Old
   AACS: Analytical thinking

11) Using prices from 2012, GDP grew 10 percent between 2012 and 2013; using prices from 2013,
    GDP grew 8 percent between 2012 and 2013. For its link back to the base year, the BEA will use
    ______ percent as the growth in real GDP between 2012 and 2013.
    A) 10
    B) 8
    C) 2
    D) 18
    E) 9
   Answer: E

   Topic: Real GDP
   Skill: Level 3: Using models
   Section: Chapter 5 Appendix
   Status: Old
   AACS: Analytical thinking
5.5 Integrative Questions

1) Depreciation is
   A) fall in the value of an exchange rate.
   B) the decrease in the value of capital resulting from its use and obsolescence.
   C) the decrease in the purchasing power of a dollar because of inflation.
   D) part of consumption expenditure.
   E) part of net domestic product at factor cost.

   Answer: B
   Topic: Integrative
   Skill: Level 2: Using definitions
   Section: Integrative
   Status: Old
   AACSB: Reflective thinking

2) Comparing nominal GDP of 2012 to nominal GDP of twenty years ago
   A) is an inaccurate measure of the change in total production.
   B) has no economic meaning.
   C) will be an accurate measure of the change in total production.
   D) determines the extent to which the cost of living changed.
   E) cannot be done because the two GDP measures use different prices.

   Answer: A
   Topic: Integrative
   Skill: Level 2: Using definitions
   Section: Integrative
   Status: Old
   AACSB: Reflective thinking

3) If real GDP increases over time, the cost of living will
   A) always remain constant.
   B) always decrease.
   C) always increase.
   D) either remain constant or increase.
   E) More information is needed to determine how the cost of living changes.

   Answer: E
   Topic: Integrative
   Skill: Level 3: Using models
   Section: Integrative
   Status: Old
   AACSB: Reflective thinking
4) If both the production of goods and services increase and prices rise, then the change in nominal GDP
   A) definitely understates the change in production.
   B) definitely accurately reflect the change in production.
   C) definitely overstates the change in production.
   D) either understates or might accurately reflect the change in production.
   E) More information is needed to determine how the change in nominal GDP compares to the change in production.

Answer: C

5) The nation’s supply of productive resources increases if
   A) investment is greater than depreciation.
   B) investment equals depreciation.
   C) investment is less than depreciation.
   D) Both answers A and B can be correct.
   E) None of the above answers is correct because the relationship between investment and depreciation has no bearing on the amount of the nation’s productive resources.

Answer: A

6) If a wealthy woman marries her butler, quits paying him and does not hire a new butler, then
   A) GDP definitely decreases.
   B) GDP definitely does not change.
   C) GDP definitely increases.
   D) GDP either does not change or increases.
   E) There is not enough information given to reach a conclusion.

Answer: A
5.6 Essay: GDP, Income, and Expenditure

1) Define and discuss GDP.
   Answer: GDP is the market value of all final goods and services produced within a country in a given time period. Only final goods and services are included. Goods produced as intermediate goods are excluded. The goods and services must be produced within the time period under consideration and so sales of used goods are excluded. The goods and services also are those produced within the country, so production by the country's firms that takes place in a foreign nation is not included.

2) Is every product produced in the United States included in U.S. gross domestic product?
   Answer: No, not every product produced is included in U.S. GDP. For instance, goods produced as intermediate goods are excluded. Only final goods and services are included. In addition, GDP counts only goods traded in markets, so goods and services that people produce for their own use are excluded.

3) Define and distinguish between final goods and intermediate goods.
   Answer: Final goods are those goods that are purchased by their final user. Essentially, these goods (and services) have been completed and do not need to go through further processes of completion. Examples of final goods include restaurant meals, lamps, railroad engines, and books. Intermediate goods and services are goods or services produced by one firm, bought by another, and then used as a component in the manufacture of another good or service. Basically, intermediate goods and services are used as a part of another good or service. Lumber used by a carpenter to build a table is an example of an intermediate good.
4) What are the categories of total expenditure?

Answer: There are four categories: Consumption expenditure, spending by households; investment, spending by firms to buy new capital equipment or add to inventories; government expenditure on goods and services, spending by all levels of the government to buy goods and services; and net exports of goods and services, which equals the exports of goods and services minus the imports of goods and services.

Topic: Expenditure
Skill: Level 2: Using definitions
Section: Checkpoint 5.1
Status: Old
AACSBB: Written and oral communication

5) Investment, as included in GDP, consists of what?

Answer: Investment is the purchase of new capital goods such as tools, instruments, machines, buildings, and other constructions and additions to inventories. Investment does not include the purchase or sale of stocks and bonds.

Topic: Investment
Skill: Level 1: Definition
Section: Checkpoint 5.1
Status: Old
AACSBB: Written and oral communication

6) "The amount of new stocks and bonds issued in a year adds to the country's GDP." Is this assertion correct or incorrect? Explain your answer.

Answer: The assertion is incorrect. Stocks and bonds are not counted in the country's GDP. GDP measures the production of final goods and services. Issuing new stocks or bonds does not produce a final good or service and so stocks and bonds are not included in GDP.

Topic: Investment
Skill: Level 2: Using definitions
Section: Checkpoint 5.1
Status: Old
AACSBB: Written and oral communication

7) Are stocks and bonds considered part of the investment component of GDP?

Answer: No, stocks and bonds are not part of the investment component of GDP. The investment component of GDP includes the purchase of new capital goods and changes in inventories. Stocks and bonds are not capital goods and are not changes in inventories, so they are not part of investment.

Topic: Investment
Skill: Level 1: Definition
Section: Checkpoint 5.1
Status: Old
AACSBB: Written and oral communication
8) How are changes in inventory treated in GDP?

Answer: Changes in inventory are part of the investment component of GDP. So, if Dell produces 100,000 computers this year and sells 95,000, the 5,000 unsold computers that are added to Dell’s inventory are part of the investment component of GDP for this year.

Topic: Investment, inventory
Skill: Level 1: Definition
Section: Checkpoint 5.1
Status: Old
AACSB: Written and oral communication

9) Use the idea of the circular flow diagram to explain why the value of production equals total income equals total expenditure.

Answer: The basic point is that nothing escapes the system. Firms receive the value of their production in the form of revenue. With this revenue, they pay for the factors of production they hire and what is left over after paying their costs is profit. Thus the value of production equals total income. These incomes flow from firms to households. Households then allocate their income to taxes, saving, and consumption. Taxes are collected and spent by the government. Saving by households is spent as investment by firms after being cycled through the banking system. Thus total expenditure equals the value of total income, which equals the value of production by firms.

Topic: Circular flow
Skill: Level 1: Definition
Section: Checkpoint 5.1
Status: Old
AACSB: Written and oral communication

10) What is the relationship shown by the circular flow among income, total expenditure, and GDP?

Answer: They are all equal. The value of production, which is GDP, equals income because firms pay factors (income) the revenue they receive from selling the goods and services they produce (GDP). Next, the revenue that firms receive from selling the goods and services they produce (GDP) is equal to what is spent as expenditures on the goods and services (total expenditure).

Topic: Circular flow
Skill: Level 2: Using definitions
Section: Checkpoint 5.1
Status: Old
AACSB: Written and oral communication
5.7 Essay: Measuring U.S. GDP

1) "To calculate GDP, economists begin with total income earned and then subtract total expenditure by the four sectors of the economy." Is the previous sentence true or false? Explain your answer.

Answer: The sentence is false. To calculate GDP, economists can begin with total income and then make a few adjustments but they do not subtract total expenditure. Alternatively, economists can sum total expenditure by the economy’s four sectors, but this summation is GDP.

Topic: Measuring GDP
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACSBD: Written and oral communication

2) What are the categories of expenditure used in the expenditure approach to measuring GDP?

Answer: There are four expenditure categories. The expenditure approach calculates the sum of consumption expenditure, investment, government expenditure on goods and services, and net exports of goods and services. Net exports of goods and services are the difference between exports of goods and services and imports of goods and services.

Topic: Expenditure approach
Skill: Level 1: Definition
Section: Checkpoint 5.2
Status: Old
AACSBD: Written and oral communication

3) The purchase and sale of three types of legal items are not included in this year’s GDP. What are these three items?

Answer: The three items are: used goods; financial assets; and, intermediate goods.

Topic: Expenditures not in GDP
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACSBD: Reflective thinking

4) Are sales and purchases of used goods counted as part of GDP? Why or why not?

Answer: Sales and purchases of used goods are not counted as part of GDP. GDP measures the production of final goods and services produced within a country in a given time period. So GDP for the United States for 2014 includes the goods and services produced within the United States during 2014. The point is that a used good has not been produced within the specified time period. In other words, a used automobile produced in 2012, then in 2014 traded in and resold within the United States was not produced in 2014. Because it was not produced in 2014, it is not a part of the GDP in 2014. (If the automobile was produced within the United States in 2012, the automobile was part of the U.S. GDP in 2012.)

Topic: Expenditures not in GDP, used goods
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACSBD: Written and oral communication
5) If you sell your textbook to your friend this year, does the sale count in this year's GDP?

   Answer: No, the sale would not count in this year's GDP because it is the sale of a used item. The sale of used items is not counted in GDP because GDP measures goods and services produced within a specified time frame. Unless your textbook was produced in this year, it will not count in this year's GDP. And, even if it was produced this year, it has already been included in this year's GDP when it was initially sold as a new textbook.

   Topic: Expenditures not in GDP, used goods
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.2
   Status: Old
   AACS: Written and oral communication

6) Explain how the purchases of used goods and of financial assets affect GDP.

   Answer: Used goods count in GDP for the year in which they were produced. Hence the purchase of a used good is not included in GDP. Purchases of financial assets, such as stocks, are a transfer of funds and not the purchase of a newly produced good or service. When the firm uses the funds it acquires from selling the stocks or bonds to purchase capital, the purchase of the capital will count as investment, but the initial purchase (and sale) of the financial asset itself does not count in GDP.

   Topic: Expenditures not in GDP, used goods and financial assets
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.2
   Status: Old
   AACS: Written and oral communication

7) Explain why the purchase and sale of used goods and of financial assets are not included in the calculation of GDP even though transactions in these items amount to billions of dollars daily.

   Answer: GDP measures the value of the goods and services produced in a given year. The key phrase in the definition is "produced in a given year." Used goods are counted in the GDP of the year in which they are produced and so they are not counted if they are bought and sold again. Financial assets, such as buying and selling stocks and bonds, are not production. These transactions are purely financial and are simply the changing of the ownership of assets. Hence neither the purchase nor the sale of used goods nor of financial assets are included in GDP.

   Topic: Expenditures not in GDP, used goods and financial assets
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.2
   Status: Old
   AACS: Written and oral communication
8) "When you purchase $1,000 of stock in Microsoft, your purchase is an investment and hence is part of GDP." Is this assertion correct? Explain your answer.

Answer: The assertion is incorrect. Your purchase of $1,000 of Microsoft stock does not increase GDP because it is the purchase of a financial asset. The investment component of GDP is the purchase of new capital goods. Your purchase of stock is not the purchase of a new capital good and hence, as a purely financial transaction, it is not included in GDP.

Topic: Expenditures not in GDP, financial assets
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACSB: Written and oral communication

9) What must be done to net domestic product at factor cost in order to transform it to gross domestic product? Explain why these adjustments are necessary.

Answer: Several adjustments must be made to net domestic product at factor cost in order to set it equal to GDP. First, indirect taxes must be added and subsidies must be subtracted. These changes are necessary because GDP is measured using market prices whereas net domestic product at factor cost measures what the goods and services cost to produce. The price can be different than the cost when there are taxes and subsidies present. Thus taxes must be added to the cost and subsidies subtracted in order to determine the price that was actually paid. (For instance, a DVD might cost $20 but a $1 sales tax makes the price $21.) Then, the second adjustment is that depreciation also needs to be added. Depreciation is the wear and tear on capital when it is used and when it becomes obsolete. GDP includes expenditure on investment and some investment is used to replace the capital stock that has depreciated. So, when calculating GDP using the income approach, depreciation must be included. But depreciation is not included in net domestic product at factor cost because that amount includes only payments made (as income) to the inputs that helped produce the products and no payment is made for the depreciation of capital. So the addition of depreciation (as well as the adjustments for taxes and subsidies) is necessary in order to convert net domestic product at factor cost into GDP. Finally, because records cannot be 100 percent complete, any statistical discrepancy needs to be added (or subtracted).

Topic: Income approach, adjustments
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACSB: Written and oral communication
10) Several adjustments must be made to net domestic product at factor cost in order to calculate GDP. One of these adjustments is adding depreciation. What is depreciation and why must it be added?

Answer: Depreciation is the wear and tear of capital when it is used and when it becomes obsolete. GDP includes expenditure on investment and some investment is used to replace the capital stock that has depreciated. So, when calculating GDP using the income approach, depreciation must be included. But depreciation is not included in net domestic product at factor cost because that includes only payments made (as income) to the inputs that helped produce the products and no payment is made for the depreciation of capital. Hence depreciation must be added to net domestic product at factor cost in order to calculate GDP.

Topic: Income approach, adjustments
Skill: Level 2: Using definitions
Section: Checkpoint 5.2
Status: Old
AACSB: Written and oral communication

11) Explain how GDP is measured according to the expenditure and income approaches.

Answer: GDP can be measured using the expenditure approach or the income approach. The expenditure approach uses the streams of spending and adds together the total expenditure, or spending, on final goods and services. Thus the expenditure approach calculates the sum of consumption expenditure, investment, government expenditure on goods and services, and net exports. The income approach uses another of the circular flows to calculate GDP. The income approach adds together all sources of income and then incorporates a few additional adjustments. Thus the income approach calculates the sum of wages (which is the compensation of employees) plus the net operating surplus (which is the sum of interest, rent, and profit). The sum is "net domestic product at factor cost." To change this sum to GDP, which is calculated at market prices rather than factor costs, and which is the gross product rather than net product, indirect taxes are added and subsidies subtracted, then depreciation is added, and finally any statistical discrepancy is added.

Topic: Expenditure approach and income approach
Skill: Level 4: Applying models
Section: Checkpoint 5.2
Status: Old
AACSB: Written and oral communication

12) Assume a small nation has the following statistics: its consumption expenditure is $15 million, investment is $2 million, government expenditure on goods and services is $1 million, exports of goods and services to foreigners is $1 million, and imports of goods and services from foreigners is $1.5 million. Calculate this nation’s GDP.

Answer: The nation’s GDP equals the sum of consumption expenditure, investment, government expenditure on goods and services, and net exports of goods and services, where net exports of goods and services equals of goods and services exports minus imports of goods and services. So, GDP = $15 million + $2 million + $1 million + $1 million − $1.5 million = $17.5 million.

Topic: Expenditure approach
Skill: Level 3: Using models
Section: Checkpoint 5.2
Status: Old
AACSB: Analytical thinking
<table>
<thead>
<tr>
<th>Item</th>
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<tr>
<td>Consumption expenditure</td>
<td>6,258</td>
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<tr>
<td>Investment</td>
<td>1,623</td>
</tr>
<tr>
<td>Government expenditure on goods and services</td>
<td>1,630</td>
</tr>
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<td>Exports of goods and services</td>
<td>998</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>1,252</td>
</tr>
</tbody>
</table>

13) The table above gives the values of different expenditures in the United States during 1999. Answer the following questions about the United States.
   a. What was the value of net exports of goods and services in 1999?
   b. What was (nominal) GDP equal to in 1999?
   c. What was the (nominal) value of total production equal to in 1999?

   Answer: a. Net exports of goods and services equals the value of exports of goods and services, $998 billion, minus the value of imports of goods and services, $1,252 billion, or -$254 billion.
   b. GDP equals the sum of consumption expenditure, $6,258, plus investment, $1,623, plus government expenditure on goods and services, $1,630, plus net exports, -$254, or $9,257 billion.
   c. The value of total production equals the value of GDP, so total production was $9,257 billion in 1999.

14) What is the difference between real and nominal GDP, and why do economists make this distinction?

   Answer: Real GDP is a measure of the final goods and services produced in a year valued at constant prices. Nominal GDP is the final goods and services produced in a year valued at the prices that existed during the year. Economists make the distinction between real GDP and nominal GDP because nominal GDP changes for two reasons: When the production of goods and services changes and when the prices of the goods and services change. Economists want to be able to distinguish between changes brought about by production changes and changes brought about by price changes. Real GDP allows economists to make this distinction. In particular, by using prices that are constant, a change in real GDP represents a change in the production of goods and services and factors out the change in prices. Thus real GDP removes the effect from changes in prices and thereby reveals the change in the underlying production of goods and services.

Topic: Expenditure approach  
Skill: Level 3: Using models  
Section: Checkpoint 5.2  
Status: Old  
AACSB: Analytical thinking

Topic: Real GDP versus nominal GDP  
Skill: Level 4: Applying models  
Section: Checkpoint 5.2  
Status: Old  
AACSB: Written and oral communication
15) Is it possible for nominal GDP to increase while real GDP does not change?
   Answer: Yes, it is possible for nominal GDP to increase while real GDP does not change.
   Nominal GDP changes if either prices or production change, while real GDP changes only if production changes. If production does not change while the prices of the goods and services increase, real GDP does not change while nominal GDP increases.

   Topic: Real GDP versus nominal GDP
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Written and oral communication

16) Can nominal GDP ever be less than real GDP?
   Answer: Yes, nominal GDP can be less than real GDP. If prices generally fall from one period to the next, then nominal GDP is less than real GDP. However, in the U.S. economy, because prices generally rise, nominal GDP typically is greater than real GDP (except in the base period.) But, there is no economic law that states that prices must generally rise and so there is no necessity for nominal GDP to be larger than real GDP.

   Topic: Real GDP versus nominal GDP
   Skill: Level 2: Using definitions
   Section: Checkpoint 5.2
   Status: Old
   AACSB: Written and oral communication

5.8 Essay: The Use and Limitations of Real GDP

1) Explain how our standard of living depends upon our level of real GDP per person, but there might not be a one-to-one relationship between the standard of living and real GDP per person. Give examples of things that can affect one, but not the other.
   Answer: Although GDP has a significant impact on our standard of living, it is not a perfect measure of the standard of living. GDP omits some factors that affect our standard of living, GDP does not include household production, all the tasks performed around the house. It omits underground production, the part of the economy hidden from the government. Real GDP does not include the value of people’s leisure time. And, GDP does not make allowances for environmental quality, health and life expectancy, or political freedom and social justice. All of these factors influence the quality of our life and hence our standard of living. Indeed, occasionally a change will affect GDP and the standard of living in different directions. For instance, if people decide they want more leisure and hence retire early, GDP will decrease because fewer people are working, but the standard of living will increase. Or, if there is an increase in production that creates massive amounts of pollution, GDP increases even though the standard of living likely decreases.

   Topic: Real GDP and the standard of living
   Skill: Level 4: Applying models
   Section: Checkpoint 5.3
   Status: Old
   AACSB: Written and oral communication
2) “If country A has a higher level of real GDP per person than country B, then people in Country A must enjoy a higher standard of living than people in Country B.” Is this statement true or false and explain your answer.

Answer: The statement is false. Factors other than real GDP per person affect the standard of living. For instance, factors such as household production, underground production, leisure time, and environmental quality all affect the standard of living and all are omitted from real GDP per person. In addition, the standard of living is influenced by health and life expectancy as well as by the nation's political freedom and social justice, none of which is measured by real GDP per person. Although real GDP per person is an important factor in determining a country’s standard of living, it is not the only factor.

Topic: Real GDP and the standard of living
Skill: Level 4: Applying models
Section: Checkpoint 5.3
Status: Old
AACSB: Written and oral communication

3) What is a business cycle? What are its phases and turning points?

Answer: A business cycle is the periodic but irregular up-and-down movement in production and jobs. It has two phases and two turning points. As the economy slows and the growth in real GDP turns negative, the economy enters the recession phase of the business cycle. At the bottom of the recession phase is one turning point, the trough. As the economy moves through the trough, it enters the expansion part of the business cycle during which real GDP grows. Finally, as the economy reaches its high point and swings from an expansion to a recession, the economy passes through the other turning point, the peak.

Topic: Business cycle
Skill: Level 1: Definition
Section: Checkpoint 5.3
Status: Old
AACSB: Written and oral communication

4) When total output, income, employment, and trade decline for 6 to 12 months, the economy is in what part of the business cycle?

Answer: When these real variables decline, the economy is in the recession phase of the business cycle.

Topic: Business cycle
Skill: Level 2: Using definitions
Section: Checkpoint 5.3
Status: Old
AACSB: Written and oral communication
5) List and discuss various types of goods and services omitted from measured GDP.

Answer: Household production, such as preparing meals and taking care of children, includes productive activities but does not involve market transactions. Therefore, household production is omitted as part of GDP. Underground production, such as working for cash to avoid taxes or engaging in illegal activities, is not reported to the government and hence is not counted as part of GDP. Leisure time and preserving and improving the natural environment are not production \textit{per se} but are clearly economic goods. They are not counted as part of GDP because it is hard to quantify and put a monetary value on them.

\textit{Topic: Omissions from GDP}
\textit{Skill: Level 3: Using models}
\textit{Section: Checkpoint 5.3}
\textit{Status: Old}
\textit{AACSB: Written and oral communication}

6) What would happen to measured GDP if more people started hiring workers to do household chores such as cooking and cleaning?

Answer: GDP is the value of the final goods and services that are produced in an economy over a specified time period. However, GDP, as measured, does not include the value of household production people do for themselves around their homes. Therefore if you wash your car at your home or apartment, the value of the car washing is not included in GDP. However if you hired someone to wash your car at your home or apartment, the value of the car washing would be included in GDP. Thus if more people started hiring workers to do household chores, measured GDP would increase.

\textit{Topic: Household production}
\textit{Skill: Level 3: Using models}
\textit{Section: Checkpoint 5.3}
\textit{Status: Old}
\textit{AACSB: Written and oral communication}

7) What is "underground production"? Is it included in GDP?

Answer: Underground production is the production of goods and services that remain hidden from the government. Underground production includes the production of illegal goods and services and the production of legal goods and services but in a way that avoids taxes or regulations. Underground production is not included in GDP.

\textit{Topic: Underground production}
\textit{Skill: Level 1: Definition}
\textit{Section: Checkpoint 5.3}
\textit{Status: Old}
\textit{AACSB: Written and oral communication}
8) While studying with your friend, your friend states, "Our leisure time increases GDP but lowers our standard of living because it reduces the amount of goods and services we can consume." Is your friend's statement correct?

Answer: Your friend’s assertion is incorrect on two counts. First, leisure time does not increase GDP. Indeed, by taking time away from production, leisure time decreases GDP. Second, leisure time increases our standard of living. People enjoy their leisure time and therefore having more leisure time raises their standard of living.

9) You buy new water skis and other new equipment for $2,500 and take a week off of your job, where you earn $1,000 a week, to go water skiing. The equipment you purchased was all produced in the United States. You think that the week was worth $4,000. As a result of your vacation, GDP changes by how much?

Answer: GDP changes by only the $2,500 you spent on the water skis and other equipment.

10) What is the Human Development Index?

Answer: The Human Development Index, or HDI, has been developed by the United Nations. The HDI attempts to measure the well-being of people in a given country. This index takes into account the country’s material well-being by looking at real GDP per person and also considers other key factors, such as life expectancy, health, and education levels.

11) Explain how the United Nations uses the Human Development Index (HDI) to better measure the standard of living around the globe.

Answer: Economists have long realized that the level of real GDP per person is not a total measure of a country’s standard of living. The United Nations has constructed an index, referred to as HDI, that attempts to measure the well-being of people in a given country. This index takes into account the country’s level of real GDP per person as well as other key factors, such as life expectancy, health, and education levels.
5.9 Essay: Appendix: Measuring Real GDP

<table>
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<th>Item</th>
<th>Quantity</th>
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<th>Quantity</th>
<th>Price</th>
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<td>4</td>
<td>$1.50</td>
<td>6</td>
<td>$1.75</td>
</tr>
<tr>
<td>Pepsi</td>
<td>2</td>
<td>$1.00</td>
<td>3</td>
<td>$1.25</td>
</tr>
</tbody>
</table>

1) The table gives data on the production and prices in a small economy. Use 2012 as the base period.
   a. What does nominal GDP equal in 2012?
   b. What does real GDP equal in 2012?
   c. What does nominal GDP equal in 2013?
   d. Using the chained-price method, what does real GDP equal in 2013?

Answer:  
   a. Nominal GDP in 2012 equals $8.00. Nominal GDP equals the sum of the market value of hot dogs ($6.00) plus the market value of Pepsi ($2.00).
   b. Real GDP in 2012 equals $8.00. Real GDP equals nominal GDP in the base period.
   c. Nominal GDP in 2013 equals $14.25. Nominal GDP equals the sum of the market value of hot dogs ($10.50) plus the market value of Pepsi ($3.75).
   d. Real GDP in 2013 equals $12.00. To calculate real GDP in 2013, we need the percentage change in production between 2012 and 2013 valuing the production at 2012 prices and at 2013 prices. Both percentage changes are 50 percent. (For example, using 2012 prices, production in 2012 is $8.00 and in 2013 is $12.00, a 50 percent increase.) Because both percentage changes are 50 percent, the average production change is 50 percent. Therefore real GDP in 2013 equals real GDP in 2012 multiplied by 150 percent, or ($8.00 \times 1.50) = $12.00.
2) The table gives data on the production and prices in a small economy. Use 2012 as the base period. Using the chained-price method, what is the growth rate of real GDP from 2012 to 2013?

Answer: To calculate the growth rate, it is necessary to calculate the growth rates using first 2012 and then 2013 prices and then take the average of the two rates. This procedure gives:

- Real GDP in 2012 using 2012 prices = 150
- Real GDP 2013 using 2012 prices = 350
- Real GDP 2012 using 2013 prices = 250
- Real GDP 2013 using 2013 prices = 600
- Growth rate using 2012 prices = 133.3 percent
- Growth rate using 2013 prices = 140.0 percent

Hence the growth rate equals 136.7 percent, the average of 133.3 percent and 140.0 percent.

Topic: Real GDP and nominal GDP
Skill: Level 4: Applying models
Section: Chapter 5 Appendix
Status: Old
AACSB: Analytical thinking
6.1 Labor Market Indicators

1) The Bureau of Labor Statistics (BLS) compiles information about employment by
   A) performing a census of every household in the nation.
   B) performing a quarterly survey 6,000,000 households.
   C) performing a monthly survey of 60,000 households.
   D) determining the average estimate of labor market specialists around the nation.
   E) contacting each of the 50 states’ Departments of Labor.

Answer: C

2) In order to obtain the data used to calculate the unemployment rate, the Bureau of Labor Statistics
   A) adds the number of people collecting unemployment insurance from each state.
   B) adds the state unemployment claims reports.
   C) uses a survey from 60,000 households.
   D) adds together all the reports of layoffs from businesses.
   E) uses a survey from 160,000 firms.

Answer: C

3) The purpose of the Current Population Survey is to determine the
   A) number of people in the population.
   B) employment status of the population.
   C) age structure of the population.
   D) income level of the population.
   E) prices consumers pay for the goods and services they buy.

Answer: B
4) The working-age population includes
   A) those in jails and hospitals.
   B) youngsters between the ages of 14 and 16 if they are working at least part time.
   C) employed and unemployed people over the age of 16.
   D) only employed people over the age of 16.
   E) people over the age of 16 who are in the Army.

   Answer: C

   Topic: Current population survey, working-age population
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking

5) Which of the following is true?
   A) To be classified as employed, you must be a full-time worker at a paid job.
   B) To be classified as employed, you must work at least 20 hours per week at a paid job.
   C) Part-time workers are all those who work less than 40 hours per week.
   D) To be classified as employed, you must work at least 1 hour per week at a paid job or 15 hours or more as an unpaid worker in your family business.
   E) If you are not working and turn down a job offer in the previous week, you are no longer classified as unemployed.

   Answer: D

   Topic: Current population survey, employed
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking

6) An unpaid worker in a family business is classified as
   A) not in the labor force.
   B) employed no matter how many hours the person worked in the previous week.
   C) unemployed no matter how many hours the person worked in the previous week.
   D) employed if the person worked at least 15 hours in the previous week.
   E) unemployed only if the person worked no hours in the previous week.

   Answer: D

   Topic: Current population survey, employed
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking
7) After graduating from college, Yunis, age 22, started working for his parents' real estate business as an unpaid assistant. He works 25 hours a week helping manage rental units. In the Current Population Survey, Yunis is considered
   A) part of the labor force and unemployed.
   B) part of the labor force and employed.
   C) not part of the labor force.
   D) a discouraged worker.
   E) part of the labor force but not part of the working-age population.

Answer: B

Topic: Current population survey, employed
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACS: Reflective thinking

8) If KeKe, age 32, worked 12 hours as a paid employee the week before the Current Population Survey, KeKe is classified in the Current Population Survey as ________ when calculating the unemployment rate.
   A) unemployed
   B) employed
   C) a discouraged worker
   D) not in the labor force
   E) underemployed

Answer: B

Topic: Current population survey, employed
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACS: Reflective thinking

9) Suppose a 23-year old graduate student is looking for a full-time job, but has to take a part-time job instead. He or she will be categorized in the Current Population Survey as ________ when calculating the unemployment rate.
   A) unemployed
   B) employed
   C) not in the labor force
   D) a discouraged worker
   E) underemployed

Answer: B

Topic: Current population survey, employed
Skill: Level 1: Definition
Section: Checkpoint 6.1
Status: Old
AACS: Reflective thinking
10) Which of the following people would be classified as employed in the Current Population Survey?
   A) Rich, who is working 20 hours a week but wants a full-time job
   B) Misty, who just quit her job to return full time to school
   C) April, who just graduated from college and is looking for work
   D) Jason, who was laid off from work less than 6 months ago but who has stopped looking for work
   E) Laura, who is unpaid but is working 10 hours a week in the family business she and her husband run

Answer: A

Topic: Current population survey, employed
Skill: Level 1: Definition
Section: Checkpoint 6.1
Status: Old
AACSBL: Reflective thinking

11) In the Current Population Survey, a person is considered unemployed if the person
   A) is without a job.
   B) is working anything less than 40 hours per week.
   C) is working without pay.
   D) does not have a job and is actively looking for a job.
   E) is working less than 20 hours per week.

Answer: D

Topic: Current population survey, unemployed
Skill: Level 1: Definition
Section: Checkpoint 6.1
Status: Old
AACSBL: Reflective thinking

12) To be considered unemployed, a worker must have had
   A) no employment during the week before the survey and be actively looking for a job.
   B) part-time employment while actively looking for a full-time job.
   C) no employment during the week before the survey and be actively looking for a job while a student.
   D) no employment during the day before the survey and be actively looking for a job.
   E) Both answers A and B are correct.

Answer: A

Topic: Current population survey, unemployed
Skill: Level 1: Definition
Section: Checkpoint 6.1
Status: Old
AACSBL: Reflective thinking
13) If Brian, age 24, had no job but was available for work and had looked for a job the week before the survey, Brian is classified in the Current Population Survey as
   A) unemployed.
   B) employed.
   C) a discouraged worker.
   D) not in the labor force.
   E) not in the working-age population.

Answer: A

Topic: Current population survey, unemployed
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACSB: Reflective thinking

14) Rob is considered unemployed in the Current Population Survey if he
   A) has looked for a job in the last four weeks but has not found a job.
   B) has worked at least 1 hour but not more than 15 hours as a paid employee during the last week.
   C) does not have a job and stopped looking for a job at least two months ago.
   D) has a part-time job but would like a full-time job.
   E) is in his last term of college before he graduates.

Answer: A

Topic: Current population survey, unemployed
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACSB: Reflective thinking

15) Phillip is a 22-year old who has no job and is available for work, but has not actively looked for a job in the last month. The Current Population Survey identifies Phillip as ________, ________ the labor force, and ________ the working-age population.
   A) unemployed; part of; part of
   B) unemployed; part of; not part of
   C) not unemployed; not part of; part of
   D) not unemployed; not part of; not part of
   E) not unemployed; part of; part of

Answer: C

Topic: Current population survey, unemployed
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACSB: Reflective thinking
The following are groups of individuals in the population:
1. Individuals who are under 16
2. Individuals in institutional care
3. Individual in the armed forces
4. Individuals working for pay at a fulltime job
5. Individuals who are employed
6. Individuals not employed but were available for work and were looking for work
7. Individuals not employed and looking for work

16) Using the table above, the Current Population Survey classifies the group of individuals who are left after subtracting from the total population groups 1, 2, and 3 as
   A) the working-age population.
   B) the labor force.
   C) employed.
   D) unemployed.
   E) discouraged workers.

Answer: A

17) Using the table above, the Current Population Survey classifies the group of individuals who are left after subtracting from the total population groups 1, 2, 3, 4, 5, and 6 as
   A) not in the labor force.
   B) the labor force.
   C) employed.
   D) unemployed.
   E) discouraged workers.

Answer: A

18) Using the table above, the Current Population Survey classifies the group of individuals obtained by adding groups 5 and 6 as
   A) the working age population.
   B) the labor force.
   C) employed.
   D) unemployed.
   E) discouraged workers.

Answer: B
19) The working-age population consists of all the people in the population
   A) aged 16 and over.
   B) aged 16 to 65.
   C) aged 16 and over who are not in jail, hospital, or an institution or in the U.S. Armed Forces.
   D) aged 21 and over who are not in jail, hospital, or an institution or in the U.S. Armed Forces.
   E) who are employed plus the unemployed people.
Answer: C

20) If the number of people in the labor force ________, then ________.
   A) increases; the labor force participation rate increases
   B) increases; the unemployment rate definitely increases
   C) decreases; the unemployment rate definitely decreases
   D) decreases; the labor force participation rate increases
   E) decreases, the unemployment rate does not change
Answer: A

21) The labor force is the
   A) number of employed people plus the number of unemployed people.
   B) total population divided by the number of employed people.
   C) number of employed people in the working-age population.
   D) working-age population minus the number of unemployed people.
   E) number of employed people minus the number of unemployed people.
Answer: A
22) The labor force includes people who
   i. are less than 16 years of age.
   ii. are in institutions.
   iii. are actively seeking a job but do not have a job.
      A) i only
      B) i and iii
      C) i and ii
      D) iii only
      E) i, ii, and iii
      Answer: D
      Topic: Labor force
      Skill: Level 1: Definition
      Section: Checkpoint 6.1
      Status: Old
      AACSB: Reflective thinking

23) The labor force consists of
      A) the number of people who are employed.
      B) the number of people who are unemployed and who are actively seeking work.
      C) the number of people in the working-age population who are employed or unemployed.
      D) all people in the population aged 16 and over who are not in jail, a hospital, or an institution or in the U.S. Armed Forces.
      E) the number of people who are employed minus the number of the people who are unemployed.
      Answer: C
      Topic: Labor force
      Skill: Level 1: Definition
      Section: Checkpoint 6.1
      Status: Old
      AACSB: Reflective thinking

24) The labor force is defined as the number of people who
      A) are employed plus the number of people who are unemployed.
      B) are available and looking for work but are unable to find employment.
      C) would like to have a job but have stopped seeking work.
      D) would like to have a full-time job but are working part time.
      E) are employed minus the number of people who are unemployed.
      Answer: A
      Topic: Labor force
      Skill: Level 1: Definition
      Section: Checkpoint 6.1
      Status: Old
      AACSB: Reflective thinking
25) Which of the following persons is NOT considered a part of the labor force?
   A) Mary, who has a part-time job as a day care specialist
   B) Lones, an unemployed mechanic looking for a new job
   C) Jameson, an accountant who has been temporarily laid off during the holiday season
   D) Desire, a wealthy hedge fund manager who just took early retirement
   E) Lucy, who works 20 hours a week in her father’s restaurant for no pay
   Answer: D

26) Jane is a 25 year old, full-time student. She works part time in her school library and is paid $7 an hour. She is considered to be
   A) unemployed.
   B) not in labor force.
   C) in labor force but not working.
   D) employed.
   E) not in the working-age population because she is in college.
   Answer: D

27) People over the age 16 with full-time jobs are considered to be
   A) unemployed.
   B) not in the labor force.
   C) in the labor force and employed.
   D) in the labor force unemployed.
   E) in the working-age population only because they have full-time jobs.
   Answer: C

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28) If Jose is 22-years old, is available to work but does not have a job and made no specific efforts to find a job for the previous month, Jose is classified in the Current Population Survey as
   A) unemployed.
   B) employed.
   C) not in the working-age population.
   D) not in the labor force.
   E) in the labor force but not in the working-age population.
   Answer: D
   Topic: Labor force
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking

29) The size of the labor force is
   A) equal to the size of the population.
   B) less than the number of employed workers if the number of unemployed workers is small enough.
   C) less than the number of unemployed workers if the number of employed workers is small enough.
   D) greater than the number of employed workers as long as there are some unemployed workers.
   E) equal to the working-age population.
   Answer: D
   Topic: Labor force
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking

30) The working-age population of people over the age of 16 can be divided into two groups, people
   A) in the labor force and people looking for work.
   B) in the labor force and people with a job.
   C) looking for work and those in the U.S. Armed Forces.
   D) in the labor force and people who are not in the labor force.
   E) with a job and people actively seeking a job.
   Answer: D
   Topic: Labor force
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking
31) Assume the U.S. population is 300 million. If 200 million people are of working age, 125 million are employed, and 15 million are unemployed, what is the size of the labor force?
   A) 200 million
   B) 140 million
   C) 125 million
   D) 215 million
   E) 175 million

   Answer: B
   Topic: Labor force
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Analytical thinking

32) The unemployment rate is the
   A) number of unemployed people.
   B) percentage of the population that does not have a job.
   C) percentage of the working-age population that does not have a job.
   D) percentage of the labor force that does not have a job.
   E) percentage of employed people that does not have a job.

   Answer: D
   Topic: Unemployment rate
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking

33) The unemployment rate measures the percentage of
   A) people who want full-time jobs, but can't find them.
   B) the working-age population who can't find a job.
   C) people in the labor force who can't find a job.
   D) the working-age population that can't find a full-time job.
   E) employed people who can't find a job.

   Answer: C
   Topic: Unemployment rate
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking
34) The unemployment rate equals 100 multiplied by the
   A) number of people unemployed divided by the labor force.
   B) number of people unemployed divided by the population.
   C) number of people unemployed divided by the number of people employed.
   D) labor force divided by the number of people unemployed.
   E) number of people unemployed divided by the working-age population.

   Answer: A
   Topic: Unemployment rate
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSBI: Analytical thinking

35) The unemployment rate equals
   A) (number of people employed ÷ working-age population) × 100.
   B) (number of people unemployed ÷ labor force) × 100.
   C) (labor force ÷ working-age population) × 100.
   D) (number of people employed ÷ number of people age 16 and over) × 100.
   E) (number of people unemployed ÷ number of people employed) × 100.

   Answer: B
   Topic: Unemployment rate
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSBI: Analytical thinking

36) The unemployment rate is equal to
   A) (labor force ÷ population) × 100.
   B) (number of employed people ÷ labor force) × 100.
   C) (number of unemployed people ÷ labor force) × 100.
   D) (number of unemployed people ÷ number of employed) × 100.
   E) (number of unemployed people ÷ working-age population) × 100.

   Answer: C
   Topic: Unemployment rate
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSBI: Analytical thinking

37) The unemployment rate is the number of people unemployed divided by the
    A) population, then multiplied by 100.
    B) labor force participation rate, then multiplied by the population.
    C) labor force, then multiplied by 100.
    D) number of people employed, then multiplied by 100.
    E) working-age population, then multiplied by 100.

   Answer: C
   Topic: Unemployment rate
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSBI: Analytical thinking
38) In calculating the unemployment rate, part-time workers over the age of 16 are counted as
   A) employed.
   B) unemployed.
   C) not in the labor force.
   D) employed if they are part-time workers for noneconomic reasons and unemployed if
      they are involuntary part-time workers.
   E) not in the working-age population.

   Answer: A

39) If a significant number of part-time workers successfully find full-time employment, then
   A) the unemployment rate will fall.
   B) the labor force participation rate will increase.
   C) the unemployment rate will remain unchanged.
   D) the unemployment rate will rise.
   E) Both answers A and B are correct.

   Answer: C

40) Suppose the population is 300 million people, the labor force is 200 million people, the number
    of people employed is 185 million, and the working-age population is 170 million people.
    What is the unemployment rate?
    A) 92.5 percent
    B) 7.5 percent
    C) 8.8 percent
    D) 5 percent
    E) 20 percent

   Answer: B
41) If 160 million people are employed, 15 million people are unemployed, and the population is 280 million people, the unemployment rate is
   A) 57 percent.
   B) 62.5 percent.
   C) 9.4 percent.
   D) 8.6 percent.
   E) not possible to calculate without data on the labor force.

Answer: D

Topic: Unemployment rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACSB: Analytical thinking

42) Suppose the population of Timmy Town is 1000 people and the working-age population is 800. If 200 of these people are unemployed, the unemployment rate in Timmy Town is
   A) 2 percent.
   B) 1/5 \times 100.
   C) 1/8 \times 100.
   D) 1/4 \times 100.
   E) There is not enough information provided to calculate the unemployment rate.

Answer: E

Topic: Unemployment rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACSB: Analytical thinking

43) Suppose the working-age population is 500 million, the labor force is 200 million, and the unemployment rate is 15 percent. The number of unemployed people is
   A) 30 million.
   B) 75 million.
   C) 45 million.
   D) 105 million.
   E) 15 million.

Answer: A

Topic: Unemployment rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACSB: Analytical thinking
44) In fall 2009, the population of the United States was 301 million, the working-age population was 235.7 million, the total number of people employed and unemployed was 154.9 million, and the total number of unemployed people was 14.7 million. What is the unemployment rate?

A) 51 percent  
B) 6.2 percent  
C) 4.9 percent  
D) 9.5 percent  
E) 4.6 percent

Answer: D  
Topic: Unemployment rate  
Skill: Level 2: Using definitions  
Section: Checkpoint 6.1  
Status: Old  
AACSB: Analytical thinking

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of people (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>250</td>
</tr>
<tr>
<td>Less than 16 years of age</td>
<td>30</td>
</tr>
<tr>
<td>Institutionalized</td>
<td>15</td>
</tr>
<tr>
<td>Part-time workers</td>
<td>20</td>
</tr>
<tr>
<td>Full-time workers</td>
<td>145</td>
</tr>
<tr>
<td>Looking for work in the past 4 weeks</td>
<td>10</td>
</tr>
<tr>
<td>In U.S. Armed Forces</td>
<td>10</td>
</tr>
</tbody>
</table>

45) Using the table above, the working-age population is

A) 155 million.  
B) 170 million.  
C) 195 million.  
D) 250 million.  
E) 220 million.

Answer: C  
Topic: Working-age population  
Skill: Level 3: Using models  
Section: Checkpoint 6.1  
Status: Old  
AACSB: Analytical thinking

46) Using the table above, the number of people in the labor force is

A) 145 million.  
B) 165 million.  
C) 175 million.  
D) 195 million.  
E) 185 million.

Answer: C  
Topic: Labor force  
Skill: Level 3: Using models  
Section: Checkpoint 6.1  
Status: Old  
AACSB: Analytical thinking
47) Using the table above, the unemployment rate is
   A) 5.13 percent.
   B) 5.88 percent.
   C) 6.45 percent.
   D) 6.90 percent.
   E) 5.71 percent.

Answer: E

Topic: Unemployment rate
Skill: Level 3: Using models
Section: Checkpoint 6.1
Status: Old
AACSBS: Analytical thinking

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of people (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>250</td>
</tr>
<tr>
<td>Working-age population</td>
<td>160</td>
</tr>
<tr>
<td>Labor force</td>
<td>120</td>
</tr>
<tr>
<td>Part-time workers</td>
<td>15</td>
</tr>
<tr>
<td>Full-time workers</td>
<td>100</td>
</tr>
<tr>
<td>Discouraged workers</td>
<td>2</td>
</tr>
</tbody>
</table>

48) Using the table above, the unemployment rate is
   A) 11.2 percent.
   B) 6.3 percent.
   C) 4.2 percent.
   D) 10 percent.
   E) 5.8 percent.

Answer: C

Topic: Unemployment rate
Skill: Level 3: Using models
Section: Checkpoint 6.1
Status: Old
AACSBS: Analytical thinking

49) Using the table above, the labor participation rate is
   A) 67 percent.
   B) 48 percent.
   C) 75 percent.
   D) 83 percent.
   E) 40 percent.

Answer: C

Topic: Labor force participation rate
Skill: Level 3: Using models
Section: Checkpoint 6.1
Status: Old
AACSBS: Analytical thinking
<table>
<thead>
<tr>
<th>Category</th>
<th>Number of people</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor force</td>
<td>10,000</td>
</tr>
<tr>
<td>Employed</td>
<td>9,000</td>
</tr>
<tr>
<td>Under 16 years of age</td>
<td>2,000</td>
</tr>
<tr>
<td>Working-age population</td>
<td>12,000</td>
</tr>
</tbody>
</table>

50) In the table above, the number of unemployed people is
   A) 2,000.        B) 1,000.        C) 1,100.        D) 11,000.        E) 3,000.

   Answer: B

   Topic: Unemployment
   Skill: Level 3: Using models
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Analytical thinking

51) In the table above, the unemployment rate is
   A) 12 percent.    B) 10 percent.    C) 8 percent.    D) 6 percent.    E) 11 percent.

   Answer: B

   Topic: Unemployment rate
   Skill: Level 3: Using models
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Analytical thinking

52) Using the table above, the labor force participation rate is
   A) 83.3 percent.   B) 90.0 percent.   C) 10.0 percent.  D) 11.1 percent.  E) 100 percent.

   Answer: A

   Topic: Labor force participation rate
   Skill: Level 3: Using models
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Analytical thinking
<table>
<thead>
<tr>
<th>Category</th>
<th>Number of People (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>280</td>
</tr>
<tr>
<td>Working-age population</td>
<td>210</td>
</tr>
<tr>
<td>Labor force</td>
<td>150</td>
</tr>
<tr>
<td>Employed</td>
<td>135</td>
</tr>
<tr>
<td>Unemployed</td>
<td>15</td>
</tr>
</tbody>
</table>

53) Based on the above table, the unemployment rate is
   A) 10 percent.
   B) 11.1 percent
   C) 7.1 percent.
   D) 5.4 percent.
   E) 8.6 percent.

Answer: A

Topic: Unemployment rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACSB: Analytical thinking

54) Based on the above table, the labor force participation rate is
   A) 71.4 percent.
   B) 82 percent.
   C) 53.6 percent.
   D) 75 percent.
   E) 64.3 percent.

Answer: A

Topic: Labor force participation rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACSB: Analytical thinking
### Table: Labor Force Composition

<table>
<thead>
<tr>
<th>Total Population (millions)</th>
<th>Currently Employed (millions)</th>
<th>Not Working and Looking for Work (millions)</th>
<th>Want to Work But No Longer Looking for Work (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>40</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

55) In the table above, the size of the labor force is
   A) 80 million.
   B) 46 million.
   C) 42 million.
   D) 40 million.
   E) 34 million.

Answer: C  
**Topic:** Labor force  
**Skill:** Level 2: Using definitions  
**Section:** Checkpoint 6.1  
**Status:** Old  
**AACS B:** Analytical thinking

56) In the table above, the unemployment rate is
   A) 50.0 percent.
   B) 15.0 percent.
   C) 10.0 percent.
   D) 4.8 percent.
   E) 5.0 percent.

Answer: D  
**Topic:** Unemployment rate  
**Skill:** Level 2: Using definitions  
**Section:** Checkpoint 6.1  
**Status:** Old  
**AACS B:** Analytical thinking

### Table: Number of People by Category

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of People (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marginally attached workers</td>
<td>2.1</td>
</tr>
<tr>
<td>Unemployed workers</td>
<td>12.1</td>
</tr>
<tr>
<td>Employed workers</td>
<td>140.0</td>
</tr>
<tr>
<td>Working-age population</td>
<td>250.0</td>
</tr>
</tbody>
</table>

57) Using the data in the above table, the labor force is
   A) 140.0 million.
   B) 152.1 million.
   C) 154.2 million.
   D) 250.0 million.
   E) 127.9 million.

Answer: B  
**Topic:** Labor force  
**Skill:** Level 2: Using definitions  
**Section:** Checkpoint 6.1  
**Status:** Old  
**AACS B:** Analytical thinking
58) Using the data in the above table, the unemployment rate is
   A) 9.3 percent.
   B) 8.6 percent.
   C) 8.0 percent.
   D) 4.8 percent.
   E) 4.6 percent.
Answer: C
Topic: Unemployment rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACS: Analytical thinking

59) Using the data in the above table, the labor force participation rate is
   A) 60.8 percent.
   B) 56 percent.
   C) 4.8 percent.
   D) 61.6 percent.
   E) 64.4 percent.
Answer: A
Topic: Labor force participation rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACS: Analytical thinking

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of people (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discouraged workers</td>
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60) From the table above, which gives data about the U.S. labor market in 1933, the labor force is
   A) 48 million.
   B) 60 million.
   C) 65 million.
   D) 100 million.
   E) 12 million.
Answer: B
Topic: Labor force
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACS: Analytical thinking
61) From the table above, which gives data about the U.S. labor market in 1933, the labor force participation rate is
   A) 12 percent.
   B) 48 percent.
   C) 60 percent.
   D) 95 percent.
   E) 65 percent.
Answer: C

62) From the table above, which gives data about the U.S. labor market in 1933, the unemployment rate is
   A) 2 percent.
   B) 18 percent.
   C) 20 percent.
   D) 25 percent.
   E) 35 percent.
Answer: C

63) If the working age population _______ and the labor force does not change, the ________.
   A) increases; labor force participation rate will increase
   B) increases; labor force participation rate will decrease
   C) increases; unemployment rate will increase
   D) decreases; unemployment rate will increase
   E) decreases; labor force will increase
Answer: B
64) The labor force participation rate is equal to
   A) (labor force ÷ population) × 100.
   B) (labor force ÷ working-age population) × 100.
   C) (number of employed workers ÷ labor force) × 100.
   D) (number of employed workers ÷ working-age population) × 100.
   E) (number of employed workers ÷ population) × 100.
   Answer: B
   Topic: Labor force participation rate
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Analytical thinking

65) The labor force participation rate is the
   A) labor force divided by the working-age population, then multiplied by 100.
   B) number of people employed divided by the labor force, then multiplied by 100.
   C) labor force divided by the population, then multiplied by 100.
   D) discouraged workers divided by the labor force, then multiplied by 100.
   E) number of people employed divided by the population, then multiplied by 100.
   Answer: A
   Topic: Labor force participation rate
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking

66) If the number of employed people is 150 million, the number of unemployed people is 50 million, and the working-age population equals 285 million people, the labor force participation rate is
   A) 70.2 percent.
   B) 81 percent.
   C) 17.5 percent.
   D) 25 percent.
   E) 52.6 percent.
   Answer: A
   Topic: Labor force participation rate
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Analytical thinking
67) If the working-age population is 20 million and labor force is 13 million, the labor force participation rate is
   A) 65 percent.
   B) 35 percent.
   C) 153 percent.
   D) 60 percent.
   E) impossible to calculate because data on the number of employed workers is needed.
   Answer: A

68) Suppose the U.S. population is 275 million. If 210 million people are of working age, 135 million are employed, and 6 million are unemployed, what is the labor force participation rate?
   A) 67 percent
   B) 76 percent
   C) 49 percent
   D) 64 percent
   E) 51 percent
   Answer: A

69) In January of 2001, the population of the United States was 276.8 million, the working-age population was 210.2 million, the total number of people employed was 140 million, and the total number of people unemployed was 5.0 million. What was the labor force participation rate?
   A) 78 percent
   B) 56 percent
   C) 69 percent
   D) 90 percent
   E) 67 percent
   Answer: C
70) In August of 2013, the number of employed persons in the United States was 144.2 million, the number of unemployed persons was 11.3 million, and the number of persons not in the labor force was 90.5 million. What was the labor force in August of 2013?
   A) 53.7 million
   B) 144.2 million
   C) 155.5 million
   D) 132.9 million
   E) There is not enough information to answer this question.

Answer: C

71) In August of 2013, the number of employed persons in the United States was 144.2 million, the number of unemployed persons was 11.3 million, and the number of persons not in the labor force was 90.5 million. What was the unemployment rate in August of 2013?
   A) 7.3%
   B) 7.8%
   C) 12.4%
   D) 8.5%
   E) There is not enough information to answer this question.

Answer: A

72) In August of 2013, the number of employed persons in the United States was 144.2 million, the number of unemployed persons was 11.3 million, and the number of persons not in the labor force was 90.5 million. What was the working-age population in August of 2013?
   A) 155.5 million
   B) 234.7 million
   C) 246.0 million
   D) 101.8 million
   E) There is not enough information to answer this question.

Answer: C
73) In August of 2013, the number of employed persons in the United States was 144.2 million, the number of unemployed persons was 11.3 million, and the number of persons not in the labor force was 90.5 million. What was the labor force participation rate in August of 2013?
   A) 92.7%
   B) 63.2%
   C) 58.2%
   D) 58.6%
   E) There is not enough information to answer this question.

Answer: B

Topic: Labor force participation rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: New
AACSB: Reflective thinking

74) If half of all unemployed individuals suddenly gave up looking for work, the unemployment rate would ______ and the labor force participation rate would ______.
   A) decrease; decrease
   B) decrease; increase
   C) increase; decrease
   D) increase; increase
   E) There is not enough information to answer this question.

Answer: A

Topic: Labor force participation rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: New
AACSB: Reflective thinking

75) A weakness that could be noted about the unemployment rate is that it
   A) does not account for the underutilization of workers.
   B) considers marginally attached workers as unemployed.
   C) overestimates the number of part-time workers.
   D) does not count part-time workers.
   E) counts discouraged workers as employed.

Answer: A

Topic: Unemployment rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACSB: Reflective thinking
76) A marginally attached worker
   i. does not have a job and has not looked for one in the last month.
   ii. is available and willing to work.
   iii. must work at least 1 hour per week.

   A) iii only    B) ii only    C) ii and iii    D) i and ii    E) i only

   Answer: D

   Topic: Marginally attached worker
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking

77) A marginally attached worker is
   A) a person who is not happy with his or her job.
   B) someone who works part-time more than 25 hours per week but wants full-time work.
   C) someone who does not have a job but is available and willing to work and has made specific but unsuccessful efforts to find a job during the past 4 weeks.
   D) someone who does not have a job but is available and willing to work but has not made specific efforts to find a job during the past 4 weeks.
   E) another name for an unemployed worker.

   Answer: D

   Topic: Marginally attached worker
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking

78) A marginally attached worker is
   A) a worker who is unhappy at his or her job.
   B) a worker who is looking for a job but can’t find one.
   C) a worker who does not have a job and is available and wants one but has not made any efforts to find a job within the previous four weeks.
   D) a person who only works part time but wants full-time work.
   E) counted as unemployed in the official labor market statistics.

   Answer: C

   Topic: Marginally attached worker
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking
79) Which of the following would be considered a marginally attached worker?
   i. Amy, who is working 20 hours per week at her father’s business
   ii. Carl, who isn’t working and has not looked for work in 3 months because he has been turned down for work when he last looked
   iii. Keke, who quit her job to take care of her daughter
      A) ii only
      B) i and ii
      C) ii and iii
      D) i only
      E) i, ii, and iii

   Answer: A
   
   Topic: Marginally attached worker
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking

80) Suppose that Mel (who is 27) is not working, but looked for a job as recently as 2 months ago. Mel would like a job and he is available for work. He is considered
   A) unemployed.
   B) a member of the labor force and unemployed.
   C) a member of the labor force, but not unemployed.
   D) a member of the working-age population
   E) a marginally attached worker.

   Answer: E
   
   Topic: Marginally attached worker
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking

81) Which of the following would be considered a marginally attached worker?
   i. Lou, who worked 15 hours unpaid at her mother’s store last month
   ii. Sylvia, who is not working and hasn’t looked for work in 3 months
   iii. Meredith, who is no longer working after taking early retirement from her employer.
      A) i and iii
      B) i and ii
      C) i only
      D) ii only
      E) i, ii, and iii

   Answer: D
   
   Topic: Marginally attached worker
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking
82) Andrew is not working, but is available and willing to work after finishing a month–long mission trip for his church. While on his mission, Andrew did not look for work. Andrew is considered
   A) unemployed.
   B) part of the labor force.
   C) a marginally attached worker.
   D) a discouraged worker.
   E) Both answers A and B are correct.

Answer: C

Topic: Marginally attached worker
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACSB: Reflective thinking

83) People who are willing and able to work but are not looking for work because they have been discouraged by their previous futile efforts are called
   A) unemployed workers.
   B) discouraged workers.
   C) unhappy workers.
   D) involuntarily unemployed.
   E) part–time lookers.

Answer: B

Topic: Discouraged workers
Skill: Level 1: Definition
Section: Checkpoint 6.1
Status: Old
AACSB: Reflective thinking

84) Discouraged workers who are over 16 years old are
   i. not counted as unemployed.
   ii. part of the working–age population.
   iii. part of the labor force.

   A) i only
   B) ii only
   C) i and ii
   D) ii and iii
   E) i, ii, and iii

Answer: C

Topic: Discouraged workers
Skill: Level 1: Definition
Section: Checkpoint 6.1
Status: Old
AACSB: Reflective thinking
85) Discouraged workers are included in the calculation of the
i. unemployment rate.
ii. labor force participation rate.
iii. working-age population.
   A) i only        B) ii only        C) i and ii        D) iii only        E) ii and iii
Answer: D
Topic: Discouraged workers
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACS: Reflective thinking

86) Discouraged workers
   A) would decrease the unemployment rate if they were added to the number of
      unemployed workers.
   B) would increase unemployment rate if they were added to the number of unemployed
      workers.
   C) are counted as one-half of a worker in the unemployment statistics.
   D) are counted as unemployed workers when the unemployment rate is calculated.
   E) are not included in the calculation of the unemployment rate, the labor force, or the
      working-age population.
Answer: B
Topic: Discouraged workers
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACS: Reflective thinking

87) Rick lost his job as a logistics and distribution coordinator nearly three years ago. After a long
    and failed search, Rick finally gives up and stops looking for a new job. Rick’s decision to
    suspend his job search causes the unemployment rate to _______ and the labor force
    participation rate to _______.
    A) increase; decrease
    B) decrease; decrease
    C) stay the same; decrease
    D) increase; stay the same
    E) increase; increase
Answer: B
Topic: Discouraged workers
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: New
AACS: Reflective thinking
88) In 2008 as the recession worsened, suppose discouraged workers were included as part of the unemployment rate. Which of the following would have occurred?
   A) The unemployment rate would have increased.
   B) The unemployment rate would have decreased.
   C) The labor force participation rate would not have changed.
   D) The unemployment rate would not have changed.
   E) The labor force participation rate would have decreased.
   Answer: A

89) Part-time workers are defined as people who are working
   A) less than 20 hours per week.
   B) between 20 and 35 hours per week.
   C) less than 35 hours per week.
   D) more than 10 hours per week.
   E) fewer hours than they would want.
   Answer: C

90) A worker is considered part time if the worker
   A) usually works less than 40 hours per week.
   B) is not employed but is actively looking for work.
   C) is a full-time student without a job.
   D) usually works less than 35 hours per week.
   E) is not employed and is not actively looking for work.
   Answer: D
91) Harry works at the video rental store for 20 hours per week. He’s asked his boss to allow him to work 40 hours per week, but has been told that business is too slow. Harry is considered
   A) a discouraged worker.
   B) an involuntary part-time worker.
   C) a marginally attached worker.
   D) not in the labor force.
   E) a job seeker.
   Answer: B

92) People who are working up to 34 hours per week but would like to work more are considered
   A) involuntary part-time workers.
   B) discouraged workers.
   C) job leavers.
   D) job seekers.
   E) unemployed.
   Answer: A

93) Involuntary part-time workers are not working more hours due to
   A) economic reasons.
   B) a lack of training and skills.
   C) an increase in the labor force.
   D) family reasons.
   E) educational commitments.
   Answer: A
94) Julie works part-time for economic reasons. She would be considered
   A) an involuntary part-time worker.
   B) a discouraged worker.
   C) a job seeker.
   D) not in the labor force.
   E) unemployed as calculated by the Bureau of Labor statistics.

Answer: A

95) Involuntary part-time workers are workers who
   A) work less than 35 hours but would like to work full time.
   B) work more than 35 hours but would like to work less than 35 hours.
   C) work have lost their jobs within the last four weeks and are seeking another job.
   D) work less than 35 hours by choice.
   E) have withdrawn from the labor market.

Answer: A

96) In measuring the unemployment rate, part-time workers are ________, and discouraged workers are ________.
   A) included as employed; included as unemployed
   B) excluded; included as unemployed
   C) included as employed; excluded
   D) excluded; excluded
   E) included as unemployed if they are involuntary part-time workers; excluded

Answer: C
97) In a country with a working-age population of 200 million, 140 million people are employed and 20 million are unemployed. The size of the labor force is
   A) 200 million.
   B) 160 million.
   C) 140 million.
   D) 20 million.
   E) 120 million.
Answer: B
Topic: Labor force
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AASCB: Analytical thinking

98) Assume the U.S. population is 300 million. If the working age population is 240 million, 150 million are employed, and 6 million are unemployed, what is the labor force?
   A) 300 million
   B) 240 million
   C) 156 million
   D) 150 million
   E) 144 million
Answer: C
Topic: Labor force
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AASCB: Analytical thinking

99) To be counted as employed by the BLS, in the week before the survey the person must have worked for pay
   A) at least 1 hour.
   B) at least 5 hours.
   C) more than 20 hours.
   D) 40 hours.
   E) None of the above is right because the BLS counts as employed anyone who works volunteer hours at a non-profit institution.
Answer: A
Topic: Current population survey, employed
Skill: Level 1: Definition
Section: Checkpoint 6.1
Status: Old
AASCB: Reflective thinking
100) Which of the following people would be considered unemployed?
   A) Sam, a part-time worker who wishes to work full time
   B) Pat, who gave up looking for a job because he was discouraged about his job prospects
   C) Victoria, who does not have a job and has been actively searching for work, but turned down a job paying less than she desired
   D) Shirley, who is working but expects to be laid off at the end of the month
   E) Bobby, a full-time student in his last term before he graduates and who has not yet started to look for a job

   Answer: C

   Topic: Current population survey, employed
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking

101) Bo is available and willing to work but has not actively looked for work in the past month. Bo is _______ of the labor force and is _______.
   A) part; counted as unemployed
   B) part; not counted as unemployed
   C) not part; not counted as unemployed
   D) not part; counted as unemployed only if he has had a job within the last 12 months
   E) not part; counted as unemployed regardless of whether or not he has had a job within the last 12 months

   Answer: C

   Topic: Current population survey, unemployed
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking

102) Which of the following statements about the United States is (are) correct?
   i. The labor force is larger than the number of employed people.
   ii. The labor force is larger than the number of unemployed people.
   iii. The number of unemployed people is larger than the number of employed people.
   A) ii only
   B) iii only
   C) ii and iii
   D) i and ii
   E) i, ii, and iii

   Answer: D

   Topic: Employment and unemployment
   Skill: Level 1: Definition
   Section: Checkpoint 6.1
   Status: Old
   AACSB: Reflective thinking
103) The unemployment rate equals
   A) \((\text{number of people without a job} \div \text{population}) \times 100\).
   B) \((\text{number of people unemployed} \div \text{labor force}) \times 100\).
   C) \((\text{number of people without a job} \div \text{working-age population}) \times 100\).
   D) \((\text{number of people unemployed} \div \text{population}) \times 100\).
   E) \(\left[\frac{\text{working-age population} - \text{number of people employed}}{\text{labor force}}\right] \times 100\).
Answer: B

104) If the working age population is 200 million, 150 million are employed, and 6 million are unemployed, the unemployment rate is
   A) 3.0 percent.
   B) 25.0 percent.
   C) 4.0 percent.
   D) 12.0 percent.
   E) 3.8 percent.
Answer: E

105) Suppose the population is 250 million people, the labor force is 150 million people, the number of people employed is 130 million and the working-age population is 200 million people. What is the unemployment rate?
   A) 8.0 percent
   B) 10.0 percent
   C) 13.3 percent
   D) 20 million
   E) 15.4 percent
Answer: C
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<th>Country</th>
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106) The table above gives the number of people employed and the number of people unemployed in Canada, Japan, and the United States on the average during 1999. In 1999, the unemployment rate in ________ was the highest and the unemployment rate in ________ was the lowest.

A) the United States; Japan
B) Canada; the United States
C) Japan; Canada
D) Canada; Japan
E) Japan; the United States

Answer: B

107) The table above shows data reported by the Office for National Statistics for the United Kingdom in September 2000. In September 2000, the unemployment rate is

A) 5.5 percent.
B) 1,619 thousand.
C) 3.5 percent.
D) 3.7 percent.
E) 5.8 percent.

Answer: A
108) The table above shows data reported by the Office for National Statistics for the United Kingdom in September 2000. In September 2000, the labor force participation rate is
   A) 59.7 percent.
   B) 63.1 percent.
   C) 34.8 percent.
   D) 40.3 percent.
   E) 58.3 percent.
Answer: B

Topic: Labor force participation rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACS: Analytical thinking

109) Discouraged workers and marginally attached workers are
   A) counted as employed by the BLS but are not part of the labor force.
   B) counted as employed by the BLS and are part of the labor force.
   C) counted as unemployed by the BLS and are part of the labor force.
   D) not part of the labor force.
   E) counted as unemployed by the BLS but are not part of the labor force.
Answer: D

Topic: Discouraged workers
Skill: Level 1: Definition
Section: Checkpoint 6.1
Status: Old
AACS: Reflective thinking

110) While in school, Kiki spends 20 hours a week as a computer programmer for Microsoft and studies 30 hours a week.
   A) Kiki is classified as a full-time worker, working 50 hours a week.
   B) Kiki is classified as a part-time worker, working 30 hours a week.
   C) Kiki is classified as a part-time worker, working 20 hours a week.
   D) Because Kiki is a student, she is not classified as working.
   E) Because Kiki is a student, she is classified as a full-time worker, working 20 hours a week at a paid job.
Answer: C

Topic: Part-time workers
Skill: Level 1: Definition
Section: Checkpoint 6.1
Status: Old
AACS: Reflective thinking
111) Part-time workers for noneconomic reasons are people who
   A) work less than 35 hours a week but would like to work more than 35 hours a week.
   B) work more than 35 hours a week but would like to work less than 35 hours a week.
   C) have lost their jobs within the last four weeks and are seeking another job.
   D) do not want to work full time.
   E) are discouraged workers.

Answer: D

Topic: Part-time workers
Skill: Level 1: Definition
Section: Checkpoint 6.1
Status: Old
AACSB: Reflective thinking

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112) The table shows data reported by Statistics Canada for 1999. In 1999, the unemployment rate was
   A) 1.2 million.
   B) 5.0 percent.
   C) 7.6 percent.
   D) 7.9 percent.
   E) 6.1 percent.

Answer: C

Topic: Unemployment rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.1
Status: Old
AACSB: Analytical thinking

6.2 Labor Market Trends and Fluctuations

1) The average U.S. unemployment rate from 1948 has been about
   A) 10.7 percent.
   B) 19.7 percent.
   C) 5.8 percent.
   D) 2.7 percent.
   E) 15.7 percent.

Answer: C

Topic: Unemployment rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSB: Reflective thinking
2) Unemployment rates in the United States during the past 60 years
   A) have remained between 4 and 6 percent.
   B) have risen and fallen in a range between approximately 10 and 25 percent.
   C) have risen and fallen in a range between approximately 4 and 10 percent.
   D) have fallen steadily from approximately 10 percent 40 years ago to near 2 percent today.
   E) have risen steadily and today are near all-time highs.

Answer: C

Topic: Unemployment rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACS: Reflective thinking

3) A main reason for the low unemployment rate from 1995 through most of the 2000s was because of
   A) higher oil prices.
   B) the government’s policy of tightening immigration policies.
   C) the rapid development of the Internet industry and other new technologies.
   D) government’s more liberal social benefit programs.
   E) increased defense expenditures by the government.

Answer: C

Topic: Recent unemployment rates
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACS: Reflective thinking

4) During a recession, the unemployment rate
   A) is, by definition, above 25 percent.
   B) is, by definition, above 10 percent.
   C) usually increases but not necessarily to 10 percent or 25 percent.
   D) remains constant.
   E) usually decreases.

Answer: C

Topic: Unemployment rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACS: Reflective thinking
5) The unemployment rate generally _______ during recessions and generally _______ during expansions.
   A) increases; decreases
   B) decreases; increases
   C) increases; increases
   D) decreases; decreases
   E) increases; does not change

   Answer: A

   Topic: Unemployment rate
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.2
   Status: Old
   AACSB: Reflective thinking

6) During a recession the unemployment rate generally _______ and during an expansion the unemployment rate generally _______.
   A) rises; falls
   B) rises; rises
   C) falls; rises
   D) rises; does not change
   E) does not change; falls

   Answer: A

   Topic: Unemployment rate
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.2
   Status: Old
   AACSB: Reflective thinking

7) During an expansion, the unemployment rate generally
   A) rises.
   B) falls.
   C) is not affected.
   D) is, by definition, below 5 percent.
   E) is higher than during a recession.

   Answer: B

   Topic: Unemployment rate
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.2
   Status: Old
   AACSB: Reflective thinking
8) Which of the following describe the United States’ unemployment rate over the last 80 years?
   i. The unemployment rate has decreased each year since the Great Depression.
   ii. The unemployment rate has averaged about 5.7 percent since 1929.
   iii. Job creation due to defense spending and consumer spending in the 1960s drove the 
       unemployment rate to one of its lowest level.
   A) i and ii only
   B) ii and iii only
   C) i, ii and iii
   D) i only
   E) i and iii
   Answer: B

9) The highest unemployment rate in U.S. history was about
   A) 10.2 percent in 2009.
   B) 5.9 percent in 1972.
   C) 10 percent in 1982.
   D) 25 percent in 1933.
   E) 52 percent in 1939.
   Answer: D

10) During the Great Depression, the unemployment rate rose to a maximum of about
    A) 10 percent.
    B) 13 percent.
    C) 25 percent.
    D) 50 percent.
    E) 67 percent.
    Answer: C
11) The unemployment rates during the last 10 years in the Eurozone was
A) constantly lower than the unemployment rate in the United States and not rising toward the U.S. unemployment rate.
B) constantly lower than the unemployment rate in the United States but were rising toward the U.S. unemployment rate.
C) more or less constant at 3 percent.
D) generally higher than the U.S. unemployment rate.
E) approximately equal to those in the United States, with some years the U.S. unemployment rate being slightly higher and in other years the U.S. unemployment rate being slightly lower.

Answer: D

Topic: Eye on the global economy, unemployment around the world
Skill: Level 3: Using models
Section: Checkpoint 6.2
Status: Old
AACSB: Reflective thinking

12) Over the past two decades, the unemployment rates in
A) the Eurozone have been generally less than U.S. unemployment rates.
B) the Eurozone have been generally greater than U.S. unemployment rates.
C) the United Kingdom have almost always been much greater than the U.S. unemployment rates.
D) Canada are less than the U.S. unemployment rates.
E) Japan are much larger than those in the United States.

Answer: B

Topic: Eye on the global economy, unemployment around the world
Skill: Level 3: Using models
Section: Checkpoint 6.2
Status: Old
AACSB: Reflective thinking

13) Across developed and newly industrialized economies, since 1989 the United States has generally had
A) a higher unemployment rate than Japan and Hong Kong and a lower unemployment rate than the Eurozone countries.
B) a lower unemployment rate than Japan and Hong Kong.
C) a higher unemployment rate than the Eurozone countries.
D) the same unemployment rate as Canada.
E) a lower unemployment rate than Hong Kong and a higher unemployment rate than Japan and the Eurozone countries.

Answer: A

Topic: Eye on the global economy, unemployment rate around the world
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSB: Reflective thinking
14) Countries with higher than average unemployment rates have _______ compared to the United States.
   A) less regulated labor markets
   B) lower levels of technology
   C) higher levels of technology
   D) more generous unemployment benefits and more regulated labor markets
   E) a higher labor force participation rate
   Answer: D

Topic: Eye on the global economy, unemployment rate around the world
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSB: Reflective thinking

15) In the United States over the last 50 years,
   A) the labor force participation rate for women has increased to match that for women in other developed countries.
   B) both women’s and men’s labor force participation rates have increased due to technology.
   C) the change in men’s labor force participation rate explains the behavior of the unemployment rate.
   D) the labor force participation rate for women has increased to near 60 percent.
   E) women’s earning power has remained fairly constant.
   Answer: D

Topic: Labor force participation rate
Skill: Level 1: Definition
Section: Checkpoint 6.2
Status: Old
AACSB: Reflective thinking

16) In the United States, over the past 50 years the total labor force participation rate
   A) has increased.
   B) has decreased.
   C) has remained more or less constant.
   D) has fluctuated substantially.
   E) first decreased slightly and then increased significantly.
   Answer: A

Topic: Labor force participation rate
Skill: Level 1: Definition
Section: Checkpoint 6.2
Status: Old
AACSB: Reflective thinking
17) Since 1960, the labor force participation rate in the United States has
   A) increased for men and women.
   B) decreased for men and women.
   C) increased for men and decreased for women.
   D) increased for women and decreased for men.
   E) increased for women and not changed for men.

Answer: D

Topic: Labor force participation rate
Skill: Level 1: Definition
Section: Checkpoint 6.2
Status: Old
AACS B: Reflective thinking

18) Between 1960 and 2010, the labor force participation rate for women
   A) increased until about 1996.
   B) decreased in most years.
   C) did not change.
   D) first rose sharply and then, after 1996, fell equally sharply.
   E) did not change until 1992, after which it generally increased.

Answer: A

Topic: Labor force participation rate
Skill: Level 1: Definition
Section: Checkpoint 6.2
Status: Old
AACS B: Reflective thinking

19) As technology advancements have led to more white collar jobs,
   A) the unemployment rate has steadily fallen.
   B) the labor force participation rate for men and women have increased.
   C) a higher percentage of men of working age have entered the labor force.
   D) the labor force participation rate for women has increased over the last 50 years.
   E) the labor force participation rate for women has decreased since 1960.

Answer: D

Topic: Labor force participation rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACS B: Reflective thinking

20) Since 1960, the labor force participation rate in the United States
   A) has remained remarkably stable.
   B) has generally decrease.
   C) has generally increased.
   D) at first rose sharply and then gradually decreased.
   E) at first gradually decreased and in recent years has risen sharply.

Answer: C

Topic: Labor force participation rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACS B: Reflective thinking
21) The upward trend in the U.S. labor force participation rate the past 50 years is explained by
   A) the increase in the population.
   B) the increase in the male labor force participation rate.
   C) the increase in the number of discouraged workers.
   D) the increase in the female labor force participation rate.
   E) Both answers B and D are correct.
Answer: D

22) The total U.S. labor force participation rate increased over the past 50 years because
   A) the female labor force participation rate increased.
   B) more men are retiring early.
   C) fewer women are attending college.
   D) many blue-collar jobs with rigid work hours have been created in the last decade.
   E) the male labor force participation rate increased.
Answer: A

23) Which of the following statements are true concerning the labor force participation rate?
   i. The labor force participation rate for women in the United States has increased since 1959.
   ii. The labor force participation rates for women across different countries have converged to about 50 percent.
   iii. The labor force participation rate for men in the United States has decreased since 1959.
   A) i and ii
   B) i, ii and iii
   C) i and iii
   D) iii only
   E) i only
Answer: C
24) Over the last 50 years, in the United States the labor force participation rate for women ________, the labor force participation rate for men ________, and the overall labor force participation rate ________.
   A) increased; decreased; increased
   B) increased; decreased; did not change
   C) did not change; increased; increased
   D) increased; did not change; increased
   E) decreased; increased; increased

Answer: A
Topic: Labor force participation rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSB: Reflective thinking

25) Over the last 50 years, the U.S. labor force participation rate of men has ________ by ________; the labor force participation of women has ________. As a result, the overall U.S. labor force participation has ________.
   A) decreased; less than; increased; increased
   B) decreased; more than; increased; decreased
   C) decreased; about the same rate as; increased; remained steady
   D) increased; less than; decreased; decreased
   E) increased; more than; decreased; increased

Answer: A
Topic: Labor force participation rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSB: Reflective thinking

26) In part, the increase in the labor force participation rate in the United States over the last 50 years can be attributed to
   A) unsuccessful job seekers becoming discouraged workers.
   B) technological change in the home increasing the time available for paid employment.
   C) recessionary periods followed by longer expansionary periods.
   D) early retirement by men in the labor force.
   E) the large increase in the men’s labor force participation rate overcoming the large decrease in the women’s labor force participation rate.

Answer: B
Topic: Labor force participation rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSB: Reflective thinking
27) Which of the following help explain the increase in the U.S. labor force participation rate for women?
   i. There was a significant fall in the number of children women were choosing to have.
   ii. There was an increase in the educational level of women.
   iii. Technological change in the home increased the time available for work outside the home.

A) i only
B) ii only
C) i and ii
D) ii and iii
E) i, ii, and iii

Answer: D

28) In the United States, a reason for the increase of the labor force participation rate for women is that
   A) an increase in wealth allowed men to retire early.
   B) more women pursued a college education and received higher wages upon graduation.
   C) improved Social Security benefits are available for women if they work.
   D) there has been a decrease in jobs with flexible hours.
   E) fewer women married.

Answer: B

29) Over the past 50 years, the U.S. labor force participation rate has decreased for
   i. men.
   ii. women.
   iii. the over-all labor force.

A) i only
B) ii only
C) i and iii
D) ii and iii
E) i, ii, and iii

Answer: A
30) Between 1960 and 2010, the labor force participation rate for men
   A) increased in most years.
   B) decreased in most years.
   C) did not change.
   D) fluctuated, first rising until about 1989 and after that, then falling.
   E) did not change until 1992, after which it generally increased.

   Answer: B

   Topic: Labor force participation rate
   Skill: Level 1: Definition
   Section: Checkpoint 6.2
   Status: Old
   AACSB: Reflective thinking

31) Since 2008, the U.S. labor force participation rate for men has _______ and for women has _______.
   A) gone up; gone up
   B) gone down; gone up
   C) been flat; gone down
   D) been flat; been flat
   E) gone down; gone down

   Answer: E

   Topic: Labor force participation rate
   Skill: Level 1: Definition
   Section: Checkpoint 6.2
   Status: New
   AACSB: Reflective thinking

32) In 1994, the Bureau of Labor Statistics started to report
   A) the unemployment rate weekly to provide a better picture of the labor market.
   B) alternative measures of the unemployment rate that include narrower measures of the labor market.
   C) alternative measures of the unemployment rate that include broader measures of the labor market.
   D) the unemployment rate by surveying 200,000 households.
   E) B and C are correct answers.

   Answer: E

   Topic: Unemployment rate, different measures
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.2
   Status: Old
   AACSB: Reflective thinking
33) U-1 is a more _______ measure of unemployment rate than the conventional U-3 measure and U-1 counts as unemployed workers who _______.
A) narrow; have been unemployed for 15 weeks or more weeks
B) narrow; have been laid off
C) broad; have been laid off
D) broad; who are discouraged workers
E) broad; are marginally attached to the labor force
Answer: A

34) Which is true concerning U-2?
   i. It does not count marginally attached workers as unemployed.
   ii. It counts as unemployed workers who were laid off.
   iii. It is smaller than U-3.
   A) i only
   B) i and ii
   C) i and iii
   D) ii and iii
   E) i, ii and iii
Answer: E

35) U-4, U-5 and U-6 are
   A) all broader measures of the unemployment rate.
   B) all narrower measures of the unemployment rate.
   C) not used by the Bureau of Labor Statistics because they include too much variability.
   D) narrower measures of the labor force participation rate.
   E) broader measures of the labor force participation rate.
Answer: A
36) During the recessions of 2001 and 2008–09,
   A) all measures of the unemployment rate (U–1 through U–6) increased.
   B) only the broader measures of the unemployment rate increased.
   C) only the narrower measures of the unemployment rate increased.
   D) the labor force participation rate for women increased.
   E) the labor force participation rate for men increased.

Answer: A

Topic: Unemployment rate, different measures
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSBS: Reflective thinking

37) During the 2008–09 recession, the U–6 measure of the unemployment rate
   A) which counts marginally attached workers and discouraged workers as unemployed,
      reached 17 percent.
   B) which counts marginally attached workers and discouraged workers as employed,
      reached 10 percent.
   C) which counts marginally attached workers as unemployed but does not count
      discouraged workers as unemployed, reached 17 percent.
   D) which counts all part time workers as employed, reached 12 percent.
   E) which counts discouraged workers as unemployed but does not count marginally
      attached workers as unemployed, reached 17 percent.

Answer: A

Topic: Unemployment rate, different measures
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSBS: Reflective thinking

38) In the United States, part-time workers are
   A) more numerous than full-time workers.
   B) less numerous than full-time workers.
   C) about as numerous as full-time workers.
   D) considered discouraged workers.
   E) counted as unemployed in all measures of the unemployment rate.

Answer: B

Topic: Part-time workers
Skill: Level 1: Definition
Section: Checkpoint 6.2
Status: Old
AACSBS: Reflective thinking
39) In the United States, from 1980 to 2011, the percentage of
A) part-time workers who are part time for economic reasons has risen during recessions and fallen during expansions.
B) part-time workers who are part time for economic reasons has increased significantly to over 30 percent.
C) part-time workers who are part time for noneconomic reasons has risen during recessions and fallen during expansions.
D) part-time workers who are part time for noneconomic reasons has increased significantly to over 30 percent.
E) None of the above answers is correct.
Answer: A

40) In the United States, the percentage of part-time workers who are part time for noneconomic reasons
A) has fallen by almost one half since 1980.
B) does not fluctuate much with the business cycle.
C) rises during an expansionary period and falls during a recessionary period.
D) has averaged about 33 percent of all workers.
E) has increased in most years since 1980.
Answer: B

41) Since 1980, the percentage of part-time workers who are part time for economic reasons
A) has steadily decreased.
B) has steadily increased.
C) at first increased, then generally decreased.
D) generally increased in recessions and decreased in expansions.
E) has remained approximately constant.
Answer: D
42) During a recession, the percentage workers who are part time for economic reasons
   A) increases more rapidly than the percentage of part-time workers.
   B) decreases more rapidly than the percentage of part-time workers.
   C) increases proportionately with the percentage of part-time workers.
   D) decreases proportionately to the percentage of part-time workers.
   E) does not change even though the percentage of part-time workers increases.

Answer: A

Topic: Part-time workers
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSBB: Reflective thinking

43) Which of the following statements is true regarding part-time workers?
   A) Part-time workers are divided those who voluntary choose part-time work and those
      who work part-time due to economic reasons.
   B) The percentage of workers who are part time due to non-economic reasons rise
      significantly during recessions.
   C) The percentage of workers who are part time due to economic reasons does not change
      much over the business cycle.
   D) The percentage of workers who are part time due to non-economic reasons is about the
      same percentage as those who are voluntary reasons.
   E) Part-time workers who are part-time for economic reasons are included in the
      unemployment rate, but part-time workers who are part time for noneconomic reasons
      are not included in the unemployment rate.

Answer: A

Topic: Part-time workers
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSBB: Reflective thinking

44) In the 2008–09 recession, the percentage of part-time workers due to economic reasons
   A) doubled from 3 percent to 6 percent.
   B) equalled the unemployment rate for those who are part-time workers due to
      non-economic reasons.
   C) rose to almost 18 percent.
   D) did not include teenagers.
   E) decreased slightly over the period.

Answer: A

Topic: Part-time workers
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSBB: Reflective thinking
45) From 1948 to 2011, the average unemployment rate in the United States was approximately
   A) 3.1 percent.
   B) 5.8 percent.
   C) 12.0 percent.
   D) 24.4 percent.
   E) 9.6 percent.
   Answer: B
   Topic: Unemployment rate
   Skill: Level 1: Definition
   Section: Checkpoint 6.2
   Status: Old
   AACSB: Reflective thinking

46) During a recession, the unemployment rate _______ and the percentage of part-time workers
   who are involuntary part-time workers _______.
   A) rises; rises
   B) rises; falls
   C) falls; rises
   D) falls; falls
   E) rises; does not change
   Answer: A
   Topic: Unemployment rate
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.2
   Status: Old
   AACSB: Reflective thinking

47) From 1981 to 2011, the unemployment rate in the United States
   A) was always lower than the unemployment rate in Japan.
   B) almost always equaled the unemployment rate in Canada.
   C) generally rose while the unemployment rate in the Eurozone fell.
   D) was generally lower than the unemployment rate in the Eurozone.
   E) was usually higher than the unemployment rate in Canada.
   Answer: D
   Topic: Eye on the global economy, unemployment rate around the world
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.2
   Status: Old
   AACSB: Reflective thinking
48) Since 1960, in the United States the labor force participation rate for men has _______ and for women has _______.
   A) increased; increased
   B) increased; decreased
   C) decreased; increased
   D) decreased; decreased
   E) not changed; increased

Answer: C

Topic: Labor force participation rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSB: Reflective thinking

49) Between 1960 and 2011,
   A) both the male and female labor force participation rates increased.
   B) the male labor force participation rate decreased rapidly, the female labor force participation rate decreased slowly, and the two rates are now equal.
   C) the male labor force participation rate decreased and the female labor force participation rate increased.
   D) both the male and female labor force participation rates decreased slowly.
   E) the male labor force participation rate did not change and the female labor force participation rate increased.

Answer: C

Topic: Labor force participation rate
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSB: Reflective thinking

50) The women's labor force participation rate is
   A) higher in Japan than in the United States.
   B) higher in the United States than in France.
   C) higher in Italy than in the United States.
   D) higher in Spain than in Iceland.
   E) higher in the United States than in Iceland or Norway.

Answer: B

Topic: Global labor force participation rates
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSB: Reflective thinking
51) In a recession, which unemployment rate is the highest?
   A) the U-1 unemployment rate
   B) the U-6 unemployment rate
   C) the U-2 unemployment rate
   D) the U-3 unemployment rate
   E) None of the above answers is correct because the highest unemployment rate changes from one recession to the next.

Answer: B

Topic: Unemployment rate, different measures
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSBS: Reflective thinking

52) In 2012, part-time workers for noneconomic reasons were about _______ of total employment, and part-time workers for economic reasons were about _______ of total employment.
   A) 3 percent; 25 percent
   B) 17 percent; 17 percent
   C) 2 percent; 12 percent
   D) 13 percent; 20 percent
   E) 13 percent; 6 percent

Answer: E

Topic: Part-time workers
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSBS: Reflective thinking

53) The percentage of workers who work part time for noneconomic reasons.
   A) decreases during a recession as the number of discouraged workers increases.
   B) does not fluctuate much at all with the business cycle.
   C) fluctuates strongly with the business cycle.
   D) has decreased from 30 percent of the labor force in 1980 to 20 percent in 2011.
   E) has trended upward since 1980.

Answer: B

Topic: Part-time workers
Skill: Level 2: Using definitions
Section: Checkpoint 6.2
Status: Old
AACSBS: Reflective thinking
54) In the United States, the percentage of part-time workers who would like full-time work
   A) increases in recessions and decreases in expansions.
   B) changes very little from expansion to recession.
   C) in 2013 was almost 100 percent of all part-time workers.
   D) Both answers A and C are correct.
   E) Both answers B and C are correct.

Answer: A

55) The number of part-time workers for economic reasons _______ during recessions and the
   number of part-time workers for noneconomic reasons _______ during recessions
   A) increases; increases
   B) increases; decreases
   C) increases; does not change
   D) does not change; does not change
   E) decreases; increases

Answer: C

6.3 Unemployment and Full Employment

1) Frictional unemployment is the result of
   A) an economic recession.
   B) the economic decline of major industries.
   C) the normal process of jobs being created and destroyed.
   D) people not getting along (having friction) with their employers.
   E) changing weather throughout the year.

Answer: C
2) As firms search for the best employee to fill an opening and the unemployed search for the job that best fits their skills, the economy experiences
   A) structural unemployment.
   B) frictional unemployment.
   C) cyclical unemployment.
   D) changes in the business cycle.
   E) avoidable unemployment.

   Answer: B

   Topic: Types of unemployment, frictional
   Skill: Level 1: Definition
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking

3) Frictional unemployment is the result of
   A) technological change or foreign competition.
   B) normal labor market turnover.
   C) a slowdown in the rate of economic expansion.
   D) the economy entering a strong expansion.
   E) changes in the weather.

   Answer: B

   Topic: Types of unemployment, frictional
   Skill: Level 1: Definition
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking

4) _______ unemployment changes slowly and depends on ________.
   A) Frictional; the skills of the unemployed
   B) Seasonal; the rate at which people enter and exit the labor force
   C) Frictional; the rate at which people enter and exit the labor force
   D) Structural; the rate at which people enter the labor force
   E) Structural; the inflation rate

   Answer: C

   Topic: Types of unemployment, frictional
   Skill: Level 1: Definition
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking
5) The ongoing normal creation and destruction of jobs creates
   A) frictional unemployment.
   B) structural unemployment.
   C) avoidable unemployment.
   D) cyclical unemployment.
   E) destructive unemployment.
Answer: A
Topic: Types of unemployment, frictional
Skill: Level 1: Definition
Section: Checkpoint 6.3
Status: Old
AACS: Reflective thinking

6) Which type of unemployment is a permanent and healthy phenomenon in a dynamic economy?
   A) cyclical
   B) avoidable
   C) structural
   D) frictional
   E) unavoidable
Answer: D
Topic: Types of unemployment, frictional
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACS: Reflective thinking

7) The amount of frictional unemployment depends on
   A) the phase of the business cycle.
   B) the time of the year.
   C) international competition.
   D) demographic factors and unemployment benefits.
   E) Both answers A and B are correct.
Answer: D
Topic: Types of unemployment, frictional
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACS: Reflective thinking
8) A reduction in unemployment benefits will
   A) decrease the amount of frictional unemployment.
   B) increase the amount of frictional unemployment.
   C) not change the amount of frictional unemployment because unemployment benefits affects only cyclical unemployment.
   D) not change the amount of frictional unemployment because unemployment benefits affects only structural unemployment.
   E) increase the amount of cyclical unemployment.

Answer: A

Topic: Types of unemployment, frictional
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Reflective thinking

9) Bill just graduated with his degree in economics. Through Career Services he submitted his resume to several companies and he will visit them during the next two weeks. Bill is considered
   A) not in the labor force.
   B) frictionally unemployed.
   C) structurally unemployed.
   D) cyclically unemployed.
   E) employed because he is visiting firms.

Answer: B

Topic: Types of unemployment, frictional
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Reflective thinking

10) Jordan recently quit her job as a marketing consultant in Washington, D.C. and is looking for a better-paying job with an advertising agency in New York. Jordan is considered to be
    A) cyclically unemployed.
    B) structurally unemployed.
    C) not in the labor force.
    D) frictionally unemployed.
    E) a discouraged worker.

Answer: D

Topic: Types of unemployment, frictional
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: New
AACSB: Reflective thinking
11) Which of the following would be considered unemployed as part of normal labor market turnover?
   i. Juliet, who was fired when the company where she worked went bankrupt in a recession
   ii. Hannah, who quit her job to find one that better suited her skills
   iii. Charlotte, who started looking for a job upon graduation from high school
   A) i and iii
   B) i and ii
   C) i, ii and iii
   D) i and iii
   E) iii only
   Answer: A
   Topic: Types of unemployment, frictional
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.3
   Status: Old
   AACSBS: Reflective thinking

12) Rosina Gonzales quit her job in Pennsylvania and moved to California to be close to her family. She is currently looking for work, so she would be considered
   A) a discouraged worker.
   B) frictionally unemployed.
   C) cyclically unemployed.
   D) avoidably unemployed.
   E) not in the labor force because she moved more than 150 miles.
   Answer: B
   Topic: Types of unemployment, frictional
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.3
   Status: Old
   AACSBS: Reflective thinking

13) Beth has just quit her job, moved to a new city, and is looking for a new job. Beth is
   A) frictionally unemployed.
   B) structurally unemployed.
   C) distance unemployed.
   D) cyclically unemployed.
   E) locationally unemployed.
   Answer: A
   Topic: Types of unemployment, frictional
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.3
   Status: Old
   AACSBS: Reflective thinking
14) Mary has decided that she does not like Iowa and has decided to quit her job as a medical technician and move to Arizona. Mary’s unemployment as she searches for a new job is best classified as
   A) cyclical.
   B) distance.
   C) structural.
   D) frictional.
   E) traveling.
Answer: D
Topic: Types of unemployment, frictional
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Reflective thinking

15) Which of the following correctly describes "frictional unemployment"?
   A) Frictional unemployment includes only people who are job losers.
   B) Frictional unemployment includes only people who are job leavers.
   C) Frictional unemployment occurs mainly during recessions.
   D) Frictional unemployment is a normal occurrence in a growing economy.
   E) Frictional unemployment falls in recessions and rises in expansions.
Answer: D
Topic: Types of unemployment, frictional
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Reflective thinking

16) Higher _______ in Canada than in the United States help(s) explain why _______ unemployment is higher in Canada than in the United States.
   A) unemployment benefits; frictional
   B) unemployment benefits; structural
   C) prices; frictional
   D) prices; structural
   E) investment; structural
Answer: A
Topic: Types of unemployment, frictional
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Reflective thinking
17) Unemployment benefits in western Europe are more generous than in the United States. As a result, _______ in the United States.
   A) frictional unemployment is lower  
   B) frictional unemployment is higher  
   C) structural unemployment is higher  
   D) avoidable unemployment is lower  
   E) cyclical unemployment is higher

Answer: A

Topic: Types of unemployment, frictional  
Skill: Level 2: Using definitions  
Section: Checkpoint 6.3  
Status: Old  
AACS: Reflective thinking

18) Structural unemployment is the result of
   A) technological change or foreign competition.  
   B) normal labor market turnover.  
   C) a slowdown in the rate of economic expansion.  
   D) irresponsible workers with poor work habits.  
   E) changing weather patterns through the year.

Answer: A

Topic: Types of unemployment, structural  
Skill: Level 1: Definition  
Section: Checkpoint 6.3  
Status: Old  
AACS: Reflective thinking

19) Structural unemployment is the result of
   A) voluntary job quitting by workers.  
   B) changing labor needs by firms during the year.  
   C) technology changes or foreign competition.  
   D) changes in the family structure.  
   E) downturns in the business cycle.

Answer: C

Topic: Types of unemployment, structural  
Skill: Level 1: Definition  
Section: Checkpoint 6.3  
Status: Old  
AACS: Reflective thinking
20) Which type of unemployment arises when changes in technology or international competition change the skills needed to perform jobs or change the location of jobs?
   A) cyclical
   B) fluctuating
   C) structural
   D) frictional
   E) skill-set

   Answer: C

   Topic: Types of unemployment, structural
   Skill: Level 1: Definition
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking

21) Structural unemployment includes people who become unemployed from
   A) changes in the seasons.
   B) normal changes in the labor force.
   C) technological changes.
   D) changes in the business cycle.
   E) going back to school.

   Answer: C

   Topic: Types of unemployment, structural
   Skill: Level 1: Definition
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking

22) An employee who is fired from his or her job because he or she lacks the skills required to accomplish the task, is part of ________ unemployment.
   A) frictional
   B) cyclical
   C) unskilled
   D) structural
   E) withdrawal

   Answer: D

   Topic: Types of unemployment, structural
   Skill: Level 1: Definition
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking
23) Structural unemployment usually lasts ______ period of time ______ unemployment
   A) a longer; than frictional
   B) a shorter; than frictional
   C) a shorter; than seasonal
   D) a shorter; than cyclical
   E) the same; as cyclical

Answer: A

24) Which type of unemployment is most likely to lead unemployed workers to retrain or relocate?
   A) cyclical  B) forced  C) structural  D) frictional  E) search

Answer: C

25) When the automobile replaced horse-drawn carriages as the principal means of transportation, firms producing horse-drawn carriages went bankrupt and permanently laid off all their workers, thereby increasing
   i. seasonal unemployment.
   ii. structural unemployment.
   iii. cyclical unemployment.
   A) i only  B) ii only  C) i and iii  D) i and ii  E) ii and iii

Answer: B

26) During 2009, General Motors announced that it would close its Saturn facilities in the United States because of the foreign competition it faced. This corporate move
   A) increased structural unemployment.
   B) increased avoidable unemployment.
   C) increased cyclical unemployment.
   D) had no impact on unemployment.
   E) decreased frictional unemployment.

Answer: A
27) After 15 years with Ford Motor Corporation, one summer Cameron loses his job. His boss explained that his position has been downsized after the technological advances in automobile production. Cameron is best considered
   A) not in the labor force.
   B) frictionally unemployed.
   C) structurally unemployed.
   D) cyclically unemployed.
   E) avoidably unemployed.

   Answer: C

   Topic: Types of unemployment, structural
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.3
   Status: Old
   AACSBB: Reflective thinking

28) Juan recently lost his job as a travel agent, which he has had for 20 years, because the demand for his services has fallen over time as more and more people book their vacations online. Unfortunately, Juan has not been able to find a new job because he lacks the skills needed to get hired in other industries where job growth is occurring. Juan is considered to be
   A) structurally unemployed.
   B) frictionally unemployed.
   C) cyclically unemployed.
   D) a marginally attached worker.
   E) not in the labor force.

   Answer: A

   Topic: Types of unemployment, structural
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.3
   Status: New
   AACSBB: Reflective thinking

29) For twenty years, Jim was a customer service representation at a call center in Minnesota. In order to save money, his firm moved the call center to India and laid off Jim two years ago. Jim has been unable to find a similar job anywhere. Jim's unemployment is best classified as
   A) cyclical.
   B) transported.
   C) structural.
   D) frictional.
   E) competitive.

   Answer: C

   Topic: Types of unemployment, structural
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.3
   Status: Old
   AACSBB: Reflective thinking
30) Joann has just lost her job because her company was faced with more foreign competition and decided to restructure, which reduced the number of jobs at the company. Joann is
   A) frictionally unemployed.
   B) structurally unemployed.
   C) transported unemployed.
   D) cyclically unemployed.
   E) internationally unemployed.
Answer: B

Topic: Types of unemployment, structural
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Reflective thinking

31) Joe has been unable to find a job because he lacks the necessary computer skills. Joe is
   A) frictionally unemployed.
   B) structurally unemployed.
   C) educationally unemployed.
   D) cyclically unemployed.
   E) skill-set unemployed.
Answer: B

Topic: Types of unemployment, structural
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Reflective thinking

32) Cyclical unemployment includes people who become unemployed from
   A) changes in the seasons.
   B) changes in international competition.
   C) technological changes.
   D) changes in the business cycle.
   E) normal labor market turnover.
Answer: D

Topic: Types of unemployment, cyclical
Skill: Level 1: Definition
Section: Checkpoint 6.3
Status: Old
AACSB: Reflective thinking
33) The type of unemployment that arises from a decrease in real GDP is called
   A) frictional unemployment.
   B) structural unemployment.
   C) non-expansion unemployment.
   D) cyclical unemployment.
   E) downturn unemployment.
Answer: D

34) Which type of unemployment is the consequence of downturns in the business cycle?
   A) cyclical
   B) expansionary
   C) structural
   D) frictional
   E) natural
Answer: A

35) The unemployment that fluctuates over the business cycle is called
   A) frictional unemployment.
   B) structural unemployment.
   C) full unemployment.
   D) cyclical unemployment.
   E) natural unemployment.
Answer: D

36) Cyclical unemployment is
   A) the total of structural and frictional unemployment.
   B) always greater than the total of structural and frictional unemployment.
   C) created by a recession.
   D) higher when the economy is expanding.
   E) part of frictional unemployment.
Answer: C
37) John has been laid off from his job because of a general downturn in the economy. John's unemployment is best classified as
   A) cyclical.
   B) full.
   C) structural.
   D) frictional.
   E) avoidable.
   Answer: A

38) Janae was fired from her job with Microsoft in the 2008–09 recession because Microsoft's sales dipped. Janae's unemployment would be best classified as
   A) frictional unemployment.
   B) structural unemployment.
   C) sales-related unemployment.
   D) cyclical unemployment.
   E) natural unemployment.
   Answer: D

39) In 2008, as the economy moved into a recession,
   A) cyclical unemployment increased.
   B) structural unemployment decreased.
   C) natural unemployment decreased.
   D) frictional unemployment was not affected.
   E) the number of marginally attached workers decreased.
   Answer: A
40) During a recession, cyclical unemployment _______ and real GDP _______.
   A) increases; increases
   B) increases; decreases
   C) decreases; decreases
   D) decreases; increases
   E) does not change; decreases

Answer: B

41) An economic recession produces
   A) an increase in cyclical unemployment.
   B) an increase in structural unemployment.
   C) an increase in natural unemployment.
   D) a decrease in cyclical unemployment.
   E) a decrease in natural unemployment.

Answer: A

42) Cyclical unemployment
   A) is always a constant amount of unemployment.
   B) is higher during an expansion.
   C) decreases during a recession.
   D) fluctuates over the business cycle.
   E) fluctuates but not in response to the business cycle.

Answer: D
Consider the following people:

- Chris quits his job as an automobile mechanic to pursue his college education full-time.
- Darrelo was laid off from her technical support job because of a strike by production workers and is currently looking for a new job.
- Rita graduated from college and is currently looking for a job.
- Armondo quit his old job and will begin his new job in four days.
- Thorton was fired from his job as a steel worker because of massive imports of steel and he is looking for a new job.
- Jung was laid off from his job as an appraiser because the firm's business declined because of a general downturn in the economy and he is currently looking for a new job as an appraiser.

43) According to the scenario above, in which of the following groups are all the people frictionally unemployed?
   A) Rita and Darrelo
   B) Chris, Rita, and Thorton
   C) Rita and Jung
   D) Darrelo and Jung
   E) Jung

   Answer: A
   Topic: Types of unemployment, frictional
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.3
   Status: Old
   AACS: Reflective thinking

44) According to the scenario above, in which of the following groups are all the people cyclically unemployed?
   A) Jung
   B) Darrelo
   C) Jung and Rita
   D) Jung and Thorton
   E) Thorton

   Answer: A
   Topic: Types of unemployment, cyclical
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.3
   Status: Old
   AACS: Reflective thinking
45) According to the scenario above, in which of the following groups are all the people structurally unemployed?
   A) Thornton  
   B) Jung  
   C) Thornton and Darrelo  
   D) Darrelo and Thornton  
   E) Rita, Armondo, and Chris  
Answer: A  
Topic: Types of unemployment, structural  
Skill: Level 2: Using definitions  
Section: Checkpoint 6.3  
Status: Old  
AACSBA: Reflective thinking

46) During a recession, the average duration of unemployment tends to  
   A) increase.  
   B) decrease.  
   C) remain constant.  
   D) be unpredictable.  
   E) be about the same as during an expansion.  
Answer: A  
Topic: How long does it take to find a job?  
Skill: Level 1: Definition  
Section: Checkpoint 6.3  
Status: Old  
AACSBA: Reflective thinking

47) During a recession, the duration of unemployment _______ and the unemployment rate is _______ the natural rate of unemployment.  
   A) lengthens; greater than  
   B) lengthens; less than  
   C) shortens; greater than  
   D) shortens; equal to  
   E) does not change; equal to  
Answer: A  
Topic: How long does it take to find a job?  
Skill: Level 1: Definition  
Section: Checkpoint 6.3  
Status: Old  
AACSBA: Reflective thinking
48) The average duration of unemployment
   A) decreases during recessions and increases during expansions.
   B) increases during recessions and decreases during expansions.
   C) does not vary with the business cycle.
   D) decreases all the time.
   E) increases all the time.
   Answer: B

   Topic: How long does it take to find a job?
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking

49) Which is true regarding cyclical unemployment?
   i) Cyclical unemployment is positive at business cycle peaks.
   ii) Cyclical unemployment is negative at business cycle troughs.
   iii) Cyclical unemployment is zero at full employment.
   A) iii only
   B) i, ii and iii
   C) i and iii
   D) i only
   E) i and ii
   Answer: A

   Topic: Types of unemployment, cyclical
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking

50) At full employment there is no
   A) unemployment.
   B) cyclical unemployment.
   C) avoidable unemployment.
   D) frictional unemployment.
   E) structural unemployment.
   Answer: B

   Topic: Full employment
   Skill: Level 1: Definition
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking
51) Full employment occurs when
   A) the unemployment rate is zero.
   B) the cyclical unemployment rate is zero.
   C) the frictional unemployment rate is zero.
   D) the sum of frictional and structural unemployment is zero.
   E) the structural unemployment rate is zero.

Answer: B

52) Full employment occurs when
   A) structural unemployment is zero.
   B) cyclical unemployment is zero.
   C) frictional unemployment is zero.
   D) structural and frictional unemployment are zero.
   E) the unemployment rate equals zero.

Answer: B

53) When the economy is at full employment,
   A) 100 percent of the labor force is employed.
   B) there is no structural or cyclical unemployment.
   C) there is no cyclical unemployment.
   D) there is only frictional unemployment.
   E) the natural unemployment rate equals zero.

Answer: C

54) Full employment means that
   A) the unemployment rate is below 6 percent.
   B) there is no cyclical unemployment.
   C) the unemployment rate is zero.
   D) the frictional unemployment rate is equal to the structural unemployment rate.
   E) there is no frictional unemployment.

Answer: B
55) When the economy is at full employment, the
   A) natural unemployment rate is equal to 0 percent.
   B) natural unemployment rate equals the unemployment rate.
   C) natural unemployment rate is equal to 10 percent.
   D) unemployment rate is equal to 0 percent.
   E) frictional unemployment rate is equal to 0 percent.
Answer: B
Topic: Full employment
Skill: Level 1: Definition
Section: Checkpoint 6.3
Status: Old
AACS: Reflective thinking

56) Full employment occurs when the
   A) unemployment rate equals the natural unemployment rate.
   B) structural unemployment rate equals the frictional unemployment rate.
   C) natural unemployment rate equals the frictional unemployment rate.
   D) cyclical unemployment rate equals the natural unemployment rate.
   E) structural unemployment rate equals zero.
Answer: A
Topic: Full employment
Skill: Level 1: Definition
Section: Checkpoint 6.3
Status: Old
AACS: Reflective thinking

57) Full employment is the level of unemployment that occurs
   A) when everyone looking for a job has a job.
   B) when cyclical unemployment is zero.
   C) when frictional and structural unemployment are zero.
   D) when frictional, structural, and cyclical unemployment are zero.
   E) None of the above answers is correct.
Answer: B
Topic: Full employment
Skill: Level 1: Definition
Section: Checkpoint 6.3
Status: Old
AACS: Reflective thinking

58) Full employment means that
   A) 100 percent of the labor force have jobs.
   B) only those who are willing, able and looking for work are unemployed.
   C) the cyclical unemployment rate is zero.
   D) the natural unemployment rate is zero.
   E) the frictional unemployment rate is zero.
Answer: C
Topic: Full employment
Skill: Level 1: Definition
Section: Checkpoint 6.3
Status: Old
AACS: Reflective thinking
59) At full employment there still exists some unemployment because
   A) some portion of our population will always be too lazy to work.
   B) there are always people too old or young to be in the labor force.
   C) the U.S. economy is constantly creating and destroying jobs.
   D) it is unnatural to have all people work 40 hours per week.
   E) real GDP can never exceed potential GDP.

   Answer: C

   Topic: Full employment
   Skill: Level 3: Using models
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking

60) In 2012, real GDP in the United States was below potential GDP. This fact definitely means that
   A) the unemployment rate was near 10 percent.
   B) the unemployment rate was above the natural unemployment rate.
   C) the economy was in an expansion.
   D) cyclical unemployment had been decreasing.
   E) frictional unemployment was negative.

   Answer: B

   Topic: Natural unemployment rate
   Skill: Level 3: Using models
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking

61) The natural unemployment rate is the unemployment rate that exists when there is no
   A) structural unemployment.
   B) frictional unemployment.
   C) cyclical unemployment.
   D) cyclical or structural unemployment.
   E) unnecessary unemployment.

   Answer: C

   Topic: Natural unemployment rate
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking
62) Natural unemployment equals the sum of
   A) cyclical and frictional unemployment.
   B) cyclical, business, and structural unemployment.
   C) frictional and structural unemployment.
   D) business and cyclical unemployment.
   E) cyclical and structural unemployment.

   Answer: C
   Topic: Natural unemployment rate
   Skill: Level 1: Definition
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking

63) The natural unemployment rate
   A) includes only frictional and structural unemployment.
   B) is equal to zero when there are no economic fluctuations.
   C) is easy to measure.
   D) is very stable in value across time.
   E) includes some frictional, structural, and cyclical unemployment.

   Answer: A
   Topic: Natural unemployment rate
   Skill: Level 1: Definition
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking

64) The natural unemployment rate is
   A) another name for the average annual rate of unemployment.
   B) another name for the cyclical unemployment rate.
   C) the sum of cyclical and frictional unemployment rates.
   D) the unemployment rate that is not associated with the business cycle.
   E) the sum of cyclical, structural, and frictional unemployment rates.

   Answer: D
   Topic: Natural unemployment rate
   Skill: Level 1: Definition
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking

65) When cyclical unemployment is zero,
   A) frictional unemployment is zero.
   B) cyclical and frictional unemployment are zero.
   C) structural unemployment is zero.
   D) the unemployment rate equals the natural unemployment rate.
   E) the natural unemployment rate is zero.

   Answer: D
   Topic: Natural unemployment rate
   Skill: Level 1: Definition
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Reflective thinking
66) The natural unemployment rate occurs
   A) at the full employment level of unemployment.
   B) when the structural unemployment rate equals zero.
   C) when the frictional unemployment rate equals zero.
   D) when the sum of frictional and structural unemployment equals zero.
   E) when the unemployment rate equals zero.

   Answer: A

67) If the unemployment rate is less than the natural unemployment rate, then
   A) there is no frictional unemployment.
   B) cyclical unemployment is greater than zero.
   C) real GDP is less than potential GDP.
   D) real GDP is greater than potential GDP.
   E) frictional unemployment is negative.

   Answer: D

68) At the peak of a business cycle, the
   A) cyclical unemployment rate is positive.
   B) unemployment rate is above the natural unemployment rate.
   C) frictional unemployment rate is zero.
   D) unemployment rate is below the natural unemployment rate.
   E) natural unemployment rate is negative.

   Answer: D

69) The natural unemployment rate is
   A) equal to the sum of frictional, cyclical, and seasonal unemployment.
   B) not known with certainty.
   C) equal to zero.
   D) the same for all industrialized countries.
   E) equal to the sum of frictional, structural, and cyclical unemployment.

   Answer: B
70) Potential GDP is
   A) the value of the maximum amount of output that can be produced at any given time.
   B) the amount of real GDP that the economy would produce if it were at full employment of all resources.
   C) another name for real GDP.
   D) the amount of real GDP that the economy would produce if the unemployment rate was zero.
   E) the amount of real GDP that the economy would produce if all unemployment was cyclical unemployment.

Answer: B

71) Potential GDP is the level of output produced when the unemployment rate is
   A) equal to the natural unemployment rate.
   B) greater than the natural unemployment rate.
   C) less than the natural unemployment rate.
   D) zero.
   E) made up of only cyclical unemployment.

Answer: A

72) Potential GDP is reached when
   A) unemployment is zero.
   B) there is no cyclical unemployment.
   C) unemployment is above full employment.
   D) unemployment is below full employment.
   E) the natural unemployment rate equals zero.

Answer: B
73) Which of the following is true?
   A) Real GDP fluctuates around potential GDP.
   B) Potential GDP fluctuates around real GDP.
   C) Nominal GDP fluctuates around real GDP.
   D) Real GDP fluctuates around nominal GDP.
   E) When real GDP equals potential GDP, both equal nominal GDP.

Answer: A

Topic: Potential GDP and real GDP
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSBI Reflective thinking

74) During a recession,
   A) real GDP is equal to potential GDP.
   B) real GDP is less than potential GDP.
   C) real GDP is greater than potential GDP.
   D) the relationship between real GDP and potential GDP no longer exists.
   E) the actual unemployment rate is less than the natural unemployment rate.

Answer: B

Topic: Potential GDP and real GDP
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSBI Reflective thinking

75) When the unemployment rate is greater than the natural unemployment rate, real GDP is
   A) greater than potential GDP.
   B) less than potential GDP.
   C) unrelated to potential GDP.
   D) potential GDP increases.
   E) greater than full employment GDP.

Answer: B

Topic: Potential GDP and real GDP
Skill: Level 1: Definition
Section: Checkpoint 6.3
Status: Old
AACSBI Reflective thinking

76) As the unemployment rate increases,
   A) potential GDP decreases.
   B) real GDP decreases.
   C) both real GDP and potential GDP decrease.
   D) potential GDP increases.
   E) full employment GDP decreases.

Answer: B

Topic: Potential GDP and real GDP
Skill: Level 1: Definition
Section: Checkpoint 6.3
Status: Old
AACSBI Reflective thinking
77) When the unemployment rate is ________ the natural unemployment rate, real GDP is ________ potential GDP.
   A) below; above
   B) above; the same as
   C) the same as; below
   D) the same as; above
   E) above; above
Answer: A
Topic: Potential GDP and real GDP
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSBI: Reflective thinking

78) Tommy graduates from college and starts to look for a job. Tommy is
   A) frictionally unemployed.
   B) structurally unemployed.
   C) cyclically unemployed.
   D) unnecessarily unemployed.
   E) employed because he is looking for work.
Answer: A
Topic: Types of unemployment, frictional
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSBI: Reflective thinking

79) Which of the following people is frictionally unemployed?
   A) Cara, an executive who lost her job because her company could not compete with foreign
      competition and whose skills are not wanted by other companies
   B) Tran, a building construction supervisor who was fired because of a downturn in the
      building industry that is the result of a general downturn in the economy
   C) Eugene, a pharmaceutical drug salesman who was laid off when his company lost a large
      contract with an HMO
   D) Amanda, a sales associate at J.C. Penney who quit her job to attend school full time
   E) Samantha, who worked part-time in J.C. Penney to help with the Christmas rush but
      was laid off in January
Answer: C
Topic: Types of unemployment, frictional
Skill: Level 3: Using models
Section: Checkpoint 6.3
Status: Old
AACSBI: Reflective thinking
80) If an entire industry relocates to a foreign country, the relocation leads to a higher rate of _______ unemployment.
   A) frictional
   B) structural
   C) structural and frictional
   D) cyclical
   E) structural and cyclical
Answer: B

Topic: Types of unemployment, structural
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Reflective thinking

81) An increase in unemployment benefits _______ and an increase in international competition that changes the location of jobs _______.
   A) increases structural unemployment; decreases frictional unemployment
   B) decreases structural unemployment; decreases cyclical unemployment
   C) decreases cyclical unemployment; decreases cyclical unemployment
   D) increases frictional unemployment; increases structural unemployment
   E) decreases cyclical unemployment; increases cyclical unemployment
Answer: D

Topic: Types of unemployment, frictional and structural unemployment
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Reflective thinking

82) Who is cyclically unemployed?
   A) Casey, who lost his job because the technology changed so he was no longer needed
   B) Katrina, an assistant manager who quit her job to search for a better job closer to home
   C) Kathy, a steelworker who was laid off but has stopped looking for a new job because she can’t find a new job
   D) David, a new car salesman who lost his job because the economy went into a recession
   E) Samantha, who quit her job to return to college to earn her MBA
Answer: D

Topic: Types of unemployment, cyclical
Skill: Level 3: Using models
Section: Checkpoint 6.3
Status: Old
AACSB: Reflective thinking
83) At full employment, there is no
   A) unemployment.
   B) frictional unemployment.
   C) structural and seasonal unemployment.
   D) cyclical unemployment.
   E) structural unemployment.
Answer: D

84) When the economy is at full employment,
   A) the natural unemployment rate equals zero.
   B) the amount of cyclical unemployment equals zero.
   C) the amount of structural unemployment equals zero.
   D) there is no unemployment.
   E) the amount of frictional unemployment equals zero.
Answer: B

85) Which of the following lowers frictional unemployment?
   A) more young people in the economy
   B) decreasing unemployment benefits
   C) increasing the pace of technological change
   D) increasing the minimum wage
   E) None of the above answers are correct because all of the answers raise frictional unemployment.
Answer: B
86) When the unemployment rate is less than the natural unemployment rate, real GDP is _______ potential GDP.
   A) greater than
   B) less than
   C) unrelated to
   D) equal to
   E) not comparable to

Answer: A

Topic: Potential GDP and real GDP
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSBI: Reflective thinking

87) If real GDP exceeds potential GDP, then the unemployment rate _______ the natural unemployment rate.
   A) equals
   B) is greater than
   C) is less than
   D) The premise of the question is incorrect because the relationship between real GDP and potential GDP has nothing to do with the relationship between the unemployment rate and the natural unemployment rate.
   E) The premise of the question is incorrect because real GDP can never exceed potential GDP.

Answer: C

Topic: Real GDP and potential GDP
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSBI: Reflective thinking

88) When the unemployment rate is _______ the natural unemployment rate, real GDP is _______.
   A) above; increasing
   B) above; above potential GDP
   C) below; above potential GDP
   D) below; increasing
   E) equal to; either equal to potential GDP or above potential GDP

Answer: C

Topic: Real GDP and potential GDP
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSBI: Reflective thinking
6.4 Integrative Questions

Consider the following people:
- Chris quits his job as an automobile mechanic to pursue his college education full-time.
- Arrelo is temporarily laid off from her technical support job because of a strike by production workers.
- Schurita graduated from college in May and is currently looking for a job.
- Bo quit his job on September 1 and then, after looking for a new job, will begin his new job on October 1.
- Terri retired from his job on May 1.
- Vicki works part-time at Bainen Press to help pay her college tuition.

1) Bo’s actions would
   A) have no impact on the September unemployment rate or the October unemployment rate.
   B) raise the September unemployment rate and lower the October unemployment rate.
   C) raise the September unemployment rate and not change the October unemployment rate.
   D) classify him as out of the labor force in September.
   E) raise the September unemployment rate and the October unemployment rate.

   Answer: B

   Topic: Integrative
   Skill: Level 3: Using models
   Section: Integrative
   Status: Old
   AACSB: Reflective thinking

2) Vicki would be classified as
   A) a voluntary part-time worker.
   B) unemployed.
   C) an involuntary part-time work.
   D) not in the labor force because she is a full-time student.
   E) a discouraged worker.

   Answer: A

   Topic: Integrative
   Skill: Level 3: Using models
   Section: Integrative
   Status: Old
   AACSB: Reflective thinking

3) When the unemployment rate equals the natural unemployment rate, most likely the economy is producing
   A) on the production possibilities frontier.
   B) within the production possibilities frontier.
   C) beyond the production possibilities frontier.
   D) either on or within the production possibilities frontier.
   E) either on or beyond the production possibilities frontier.

   Answer: A

   Topic: Integrative
   Skill: Level 2: Using definitions
   Section: Integrative
   Status: Old
   AACSB: Reflective thinking
4) Producing an amount of GDP equal to potential GDP is most consistent with the economy producing
   A) on the production possibilities frontier.
   B) within the production possibilities frontier.
   C) beyond the production possibilities frontier.
   D) either on or within the production possibilities frontier.
   E) either on or beyond the production possibilities frontier.
   Answer: A

Topic: Integrative
Skill: Level 2: Using definitions
Section: Integrative
Status: Old
AACSB: Reflective thinking

5) After the passage of the North American Free Trade Agreement, which made it less expensive to import goods from Mexico, workers in some industries found their factories being relocated to Mexico to take advantage of lower labor costs. These workers experienced what type of unemployment?
   A) cyclical  B) trade  C) structural  D) frictional  E) foreign
   Answer: C

Topic: Integrative
Skill: Level 4: Applying models
Section: Integrative
Status: Old
AACSB: Reflective thinking

6) If the Federal government expands its support of education and retraining of workers who have been unemployed for a relatively long length of time, which type of unemployment would the education and retraining most likely be targeted?
   A) cyclical  B) government  C) structural  D) frictional  E) discouraged
   Answer: C

Topic: Integrative
Skill: Level 4: Applying models
Section: Integrative
Status: Old
AACSB: Reflective thinking
7) During the Great Depression of the 1930s when the unemployment rate was exceptionally high due to the Great Depression, the government had employment programs, such as the Civilian Conservation Corps, which built campsites and planted trees. These programs were aimed at reducing which type of unemployment?
   A) cyclical
   B) avoidable
   C) structural
   D) frictional
   E) discouraged

Answer: A

Topic: Integrative
Skill: Level 4: Applying models
Section: Integrative
Status: Old
AACS: Reflective thinking

8) Suppose people decide to buy fewer GE stoves. If General Electric reduces the number of its employees to reduce its costs but no other stove company does so, which type of unemployment results?
   A) cyclical
   B) marginal
   C) structural
   D) frictional
   E) discouraged

Answer: D

Topic: Integrative
Skill: Level 4: Applying models
Section: Integrative
Status: Old
AACS: Reflective thinking

6.5 Essay: Labor Market Indicators

1) How does the Current Population Survey determine if a person should be counted in the labor force?

Answer: To be in the labor force, a person must either be employed or unemployed. To be counted as “employed,” in the week prior to the survey the person must either have worked for pay for one hour or more or else worked without pay for fifteen hours or more in a family-owned business or else been temporarily absent from his or her job. To be counted as unemployed in the survey, the person must have had no job, been available for work, and either made specific efforts to find work within the previous four weeks or else be waiting to be recalled to a job from which they were laid off.

Topic: Unemployment rate
Skill: Level 1: Definition
Section: Checkpoint 6.1
Status: Old
AACS: Written and oral communication
2) What is the definition of the unemployment rate? How are part-time workers and discouraged workers treated when calculating the unemployment rate?

Answer: The definition of the unemployment rate is (number of unemployed)/(labor force) \times 100. In this calculation, the labor force equals the sum of employed plus unemployed people. Part-time workers are counted as employed. Thus part-time workers are counted in the labor force but are NOT counted as unemployed. Discouraged workers are people who have stopped looking for work and so are not in the labor force. Hence, when calculating the unemployment rate, discouraged workers are counted in neither the number of unemployed nor in the labor force.

3) Define the unemployment rate and labor-force participation rate. Discuss the differences between these two rates.

Answer: The unemployment rate is defined as \frac{(Number \ of \ people \ unemployed)}{(Labor \ force)} \times 100 and the labor force participation rate is defined as \frac{(Labor \ force)}{(Working-age \ population)} \times 100. The two measures give different perspectives on the labor market. The labor force participation rate tells the percentage of the working-age population that is either working or is available for work. The unemployment rate tells the percentage of the people working or available for work (the labor force) who do not have jobs.

4) What is a "marginally attached worker"?

Answer: A marginally attached worker is a person without a job, who is available and willing to work, but who has not made specific efforts to find a job within the past four weeks. Essentially, a marginally attached worker is someone who wants a job but has a weak "attachment" to the job market and so he or she stops looking.

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Topic: Unemployment rate
Skill: Level 1: Definition
Section: Checkpoint 6.1
Status: Old
AACSB: Written and oral communication

Topic: Unemployment rate and labor force participation rate
Skill: Level 3: Using models
Section: Checkpoint 6.1
Status: Old
AACSB: Written and oral communication

Topic: Marginally attached worker
Skill: Level 1: Definition
Section: Checkpoint 6.1
Status: Old
AACSB: Written and oral communication
5) What are the reasons some people choose to be part-time workers?

Answer: Some people are part-time workers for economic reasons: They want full-time work but cannot find it. These people are called "involuntary part-time workers." Other people choose to be part time for non-economic reasons. These reasons include health problems, family or personal responsibilities, and/or educational commitments that limit availability for work.

Topic: Part-time workers
Skill: Level 1: Definition
Section: Checkpoint 6.1
Status: Old
AACSBB: Written and oral communication

6) The unemployment rate is 6 percent. If the population is 300 million, and the number unemployed is 6 million and the number employed is 94 million, what is the size of the labor force?

Answer: The labor force is the sum of the number of employed people plus the number of unemployed people. Hence the labor force equals 94 million + 6 million = 100 million.

Topic: Labor force
Skill: Level 3: Using models
Section: Checkpoint 6.1
Status: Old
AACSBB: Analytical thinking

7) Suppose the current unemployment rate is 5 percent, the labor force is 400 million people, the labor force participation rate is 80 percent and the working-age population is 500 million people. What number of people are unemployed?

Answer: The number of unemployed people equals the labor force multiplied by the unemployment rate. Hence the number of unemployed people is (400 million) × (5 percent) = 20 million people.

Topic: Unemployment
Skill: Level 3: Using models
Section: Checkpoint 6.1
Status: Old
AACSBB: Analytical thinking

8) Suppose that the population is 275 million. Also assume that the labor force is 135 million and that 130 million people are employed. Calculate the unemployment rate.

Answer: The unemployment rate is (5 million unemployed ÷ 135 million labor force) × 100 = 3.7 percent.

Topic: Unemployment rate
Skill: Level 3: Using models
Section: Checkpoint 6.1
Status: Old
AACSBB: Analytical thinking
9) Suppose the population is 220 million people, the labor force is 150 million people, the number of people employed is 130 million and the working-age population is 175 million people. What is the unemployment rate?

Answer: The unemployment rate is \( \frac{20 \text{ million unemployed}}{150 \text{ million labor force}} \times 100 = 13.3 \text{ percent.} \)

Topic: Unemployment rate
Skill: Level 3: Using models
Section: Checkpoint 6.1
Status: Old
AACSB: Analytical thinking

10) Suppose the working-age population is 150 million, the labor force is 125 million, and employment is 120 million.
   a. What is the unemployment rate?
   b. Now suppose that 2 million students graduate from college and begin to look for jobs. What is the new unemployment rate if none of the students have found jobs yet?
   c. Suppose that all 2 million students find jobs. What is the unemployment rate now?

Answer: a. The unemployment rate is \( \frac{5 \text{ million unemployed}}{125 \text{ million labor force}} \times 100 = 4.0 \text{ percent.} \)
   b. The unemployment rate is \( \frac{7 \text{ million unemployed}}{127 \text{ million labor force}} \times 100 = 5.5 \text{ percent.} \)
   c. The unemployment rate is \( \frac{5 \text{ million unemployed}}{127 \text{ million labor force}} \times 100 = 3.9 \text{ percent.} \)

Topic: Unemployment rate
Skill: Level 3: Using models
Section: Checkpoint 6.1
Status: Old
AACSB: Analytical thinking

11) Suppose there are 180 million employed people and 20 million unemployed people.
   a. What is the unemployment rate?
   b. Suppose that 5 million unemployed people give up their search for jobs and become discouraged workers. What is the new unemployment rate?

Answer: a. The unemployment rate is \( \frac{20 \text{ million unemployed}}{200 \text{ million labor force}} \times 100 = 10.0 \text{ percent.} \)
   b. The unemployment rate is \( \frac{15 \text{ million unemployed}}{195 \text{ million labor force}} \times 100 = 7.7 \text{ percent.} \)

Topic: Unemployment rate, discouraged workers
Skill: Level 3: Using models
Section: Checkpoint 6.1
Status: Old
AACSB: Analytical thinking

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12) Consider the following scenario. Initially the economy has 90 million people working, 10 million people unemployed, and 20 million people not in the labor force. Then prospects for the economy improve. Five million people who previously were not in the labor force now join the 10 million previously unemployed in looking for work. For now, the economy remains with 90 million workers. What happens to the unemployment rate?

Answer: The unemployment rate rises from 10.0 percent, \( \frac{10 \text{ million unemployed}}{100 \text{ million labor force}} \times 100 \), to 14.3 percent, \( \frac{15 \text{ million unemployed}}{105 \text{ million labor force}} \times 100 \).

*Topic: Unemployment rate, discouraged workers*
*Skill: Level 3: Using models*
*Section: Checkpoint 6.1*
*Status: Old*
*AACSB: Analytical thinking*

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of people (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>246</td>
</tr>
<tr>
<td>Working-age population</td>
<td>207</td>
</tr>
<tr>
<td>Labor force</td>
<td>139</td>
</tr>
<tr>
<td>Employed</td>
<td>133</td>
</tr>
<tr>
<td>Unemployed</td>
<td>6</td>
</tr>
</tbody>
</table>

13) Based on the information in the above table, what is the unemployment rate?

Answer: The unemployment rate equals \( \frac{6 \text{ million unemployed}}{139 \text{ million labor force}} \times 100 = 4.3 \text{ percent}.\)

*Topic: Unemployment rate*
*Skill: Level 3: Using models*
*Section: Checkpoint 6.1*
*Status: Old*
*AACSB: Analytical thinking*

14) Based on the information in the above table, what is the labor force participation rate?

Answer: The labor force participation rate equals \( \frac{139 \text{ million labor force}}{207 \text{ million working-age population}} \times 100 = 67.1 \text{ percent}.\)

*Topic: Labor force participation rate*
*Skill: Level 3: Using models*
*Section: Checkpoint 6.1*
*Status: Old*
*AACSB: Analytical thinking*

6.6 Essay: Labor Market Trends and Fluctuations

1) How does the unemployment rate change in a recession and in an expansion?

Answer: During a recession, the unemployment increases. During an expansion, the unemployment rate decreases.

*Topic: Unemployment rate*
*Skill: Level 1: Definition*
*Section: Checkpoint 6.2*
*Status: Old*
*AACSB: Reflective thinking*
2) Over the last 50 years, how has a. the labor force participation rate changed?  
   b. the men’s and women’s labor force participation rates changed?  

   Answer: a. Over the past 50 years, the overall labor force participation rate increased.  
   b. Over the past 50 years, the men’s labor force participation rate decreased and the women’s labor force participation rate increased.

   Topic: Labor force participation rate  
   Skill: Level 2: Using definitions  
   Section: Checkpoint 6.2  
   Status: Old  
   AACSB: Written and oral communication

3) Over the last 50 years, how has the women’s labor force participation rate changed? What are reasons for this change?  

   Answer: Over the past 50 years, the women’s labor force participation rate has increased. Four reasons can be advanced for the increase. First, more women are graduating from college. As college graduates, their salaries are higher and these higher salaries have attracted women to the labor force. Second, technological change has created a large number of white collar jobs with flexible hours, jobs women find attractive. Third, technological change in the home has decreased the amount of time necessary to do some tasks around the house and hence increased the amount of time some women can offer to the paid workplace. Finally, more families have felt the need to have two incomes in order to bolster tight budgets.

   Topic: Labor force participation rate  
   Skill: Level 2: Using definitions  
   Section: Checkpoint 6.2  
   Status: Old  
   AACSB: Written and oral communication

4) Explain how the labor force participation rate, the unemployment rate, and the percentage of the labor force employed part time change in a recession.

   Answer: The labor force participation rate tends to decrease during a recession as more workers become discouraged. The unemployment rate increases during a recession because there are fewer jobs. The percentage of the labor force employed part time tends to increase during a recession as part-time workers for economic reasons increase.

   Topic: Labor market in a recession  
   Skill: Level 2: Using definitions  
   Section: Checkpoint 6.2  
   Status: Old  
   AACSB: Written and oral communication
6.7 Essay: Unemployment and Full Employment

1) What are the three types of unemployment and how do they change over the business cycle?

Answer: The three types of unemployment are frictional, structural, and cyclical. Of these three types, the first two—frictional and structural—have no strong relationship to the business cycle. The third type, cyclical unemployment, however is the result of the business cycle. When the economy is in a recession and people lose their jobs as a result of the recession, the unemployed workers are cyclically unemployed. Conversely, when the economy is in an expansion, cyclical unemployment decreases. Hence, cyclical unemployment increases during a recession and decreases during an expansion.

Topic: Types of unemployment
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Written and oral communication

2) Define and give an example of how a spell of frictional unemployment can begin.

Answer: Frictional unemployment is the unemployment resulting from normal turnover in the labor market. For instance, there are always people entering or reentering the labor force (entrants and reentrants) and while these people look for work, they are frictionally unemployed. Similarly, there are always some people who quit their jobs to look for something better, and these people are frictionally unemployed. And, there is always a normal ebb and flow among firms as some gain sales while others lose them. The firms that lose business might release workers and these people also are frictionally unemployed.

Topic: Types of unemployment, frictional
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Written and oral communication

3) Can frictional unemployment ever be totally eliminated? Explain your answer.

Answer: Frictional unemployment arises from normal labor market turnover. Because this type of unemployment is associated with normal changes, it is impossible to be eliminated. Indeed, some frictional unemployment is purely voluntary, with these unemployed workers choosing to become unemployed because they expect to find a job that is more satisfying.

Topic: Types of unemployment, frictional
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Written and oral communication
4) Explain the difference between frictional and structural unemployment.

Answer: Frictional unemployment is more short term and is associated with people changing jobs and entering the labor force. Structural unemployment is more long term and is associated with changes in the structure of the economy that require people to learn new skills.

Topic: Types of unemployment, frictional and structural unemployment
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Written and oral communication

5) Define and give an example of how a spell of structural unemployment can begin.

Answer: Structural unemployment arises when changes in technology or international competition changes the skills necessary for jobs or change the location of jobs. For instance, technological change, such as the invention of the personal computer, can switch the skills needed for jobs, say from the ability to repair typewriters to the ability to repair computers. In this case, the people who lose their jobs and do not have the necessary skills to perform the new jobs are structurally unemployed. In addition, there are times when foreign competition causes large downscaling in sectors of the U.S. economy as U.S. firms find that they cannot compete with foreign firms. In this case, the U.S. workers who lose their jobs do not go overseas to take jobs in the expanding foreign companies, so the workers are structurally unemployed.

Topic: Types of unemployment, structural
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Written and oral communication

6) Explain what type of unemployment changes with the business cycle and how it changes.

Answer: Cyclical unemployment is the unemployment that changes with the business cycle. Cyclical unemployment rises when the economy is in the recession part of a business cycle and decreases when the economy is in the expansion part of the business cycle.

Topic: Types of unemployment, structural
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Written and oral communication
7) Why is there unemployment even when the economy is at “full employment”?
   Answer: There is unemployment even at “full employment” because there always will be
   unemployment. Unemployment is a natural occurrence in any economy with changes, such as high school or college graduates entering the labor force, or technological
   advances in one sector, or consumer preferences changing to favor one product over another. Frictional and structural unemployment will always exist. Cyclical
   unemployment, however, is a different matter. Cyclical unemployment does not seem to have the same degree of inevitability and hence full employment is defined as
   occurring when cyclical unemployment equals zero.

   Topic: Full employment
   Skill: Level 2: Using definitions
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Written and oral communication

8) Explain the relationship(s) between full employment, cyclical unemployment, the natural
   unemployment rate, and potential GDP.
   Answer: The economy is at full employment when there is no cyclical unemployment. The
   unemployment rate at full employment is called the natural unemployment rate. Because there is no cyclical unemployment, the natural unemployment rate is
   comprised of only frictional and structural unemployment. The level of output that the
   economy would produce if it was at full employment is called potential GDP.

   Topic: Full employment, natural unemployment rate, potential GDP
   Skill: Level 1: Definition
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Written and oral communication

9) For the past decade, the unemployment rate in Western Europe has been higher than the
   unemployment rate in the United States. Based on this fact, is the natural unemployment rate
   larger in Western Europe or in the United States? Why might the natural rates differ between
   the two areas?
   Answer: The natural unemployment rate is probably higher in Western Europe than in the
   United States. A major reason why this difference exists is that unemployment benefit
   payments in Western Europe are higher than in the United States, so people stay
   frictionally unemployed longer in Western Europe.

   Topic: Natural unemployment rate
   Skill: Level 3: Using models
   Section: Checkpoint 6.3
   Status: Old
   AACSB: Written and oral communication
10) Consider the following statement: "Real GDP and potential GDP are always equal." Is this statement true or false? Explain your answer.

Answer: Real GDP often differs from potential GDP. Real GDP equals potential GDP only when the economy is at full employment. However, the economy is not always at full employment. When employment is less than full employment, real GDP is less than potential GDP and the economy is in a recession. When employment exceeds full employment, real GDP exceeds potential GDP and the economy is in an expansion.

Topic: Potential GDP and real GDP
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Written and oral communication

11) What is the relationship over the business cycle of potential GDP and real GDP?

Answer: The level of output that the economy would produce if it was at full employment is called potential GDP. However, the economy is not always at full employment. In a recession, employment is less than full employment and so real GDP is less than potential GDP. And, in an expansion, employment can exceed full employment so that real GDP exceeds potential GDP.

Topic: Potential GDP and real GDP
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Written and oral communication

12) Explain the relationship between real GDP and potential GDP and between the unemployment rate and the natural unemployment rate as the economy moves through a business cycle.

Answer: Potential GDP is the level of GDP when the economy is at full employment. Real GDP is the level of GDP and can be above or below potential GDP depending on whether employment is above or below full employment. The natural unemployment rate is the unemployment rate when the economy is at full employment. The unemployment rate can be above or below the natural unemployment rate. In a recession, real GDP is less than potential GDP and unemployment exceeds the natural rate. In an expansion, real GDP is greater than potential GDP and unemployment is less than the natural rate.

Topic: Potential GDP and real GDP
Skill: Level 2: Using definitions
Section: Checkpoint 6.3
Status: Old
AACSB: Written and oral communication
Chapter 7  The CPI and the Cost of Living

7.1 The Consumer Price Index

1) The CPI stands for
   A) Citizens Paying Index.
   B) Corporate Pricing Index.
   C) Consumer Paying Index.
   D) Consumer Price Index.
   E) Corporate/Consumer Payment Index.

   Answer: D

   Topic: CPI
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Reflective thinking

2) The Consumer Price Index is calculated by the
   B) Department of Labor.
   C) Department of Commerce.
   D) Federal Reserve Bank of New York.
   E) Society for Consumer Protection.

   Answer: A

   Topic: CPI
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Reflective thinking

3) The CPI is a measure of the
   A) percentage change in the price level.
   B) average prices of all goods.
   C) average prices paid by consumers for a fixed basket of goods and services.
   D) average prices of all goods and services produced.
   E) average change in the output of the goods and services purchased by a typical urban consumer.

   Answer: C

   Topic: CPI
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Reflective thinking
4) The Consumer Price Index (CPI) measures the changes of the
   A) prices paid by consumers for a fixed market basket of consumer goods and services.
   B) quantities of a fixed market basket of goods produced by businesses.
   C) lowest prices paid by consumers for a fixed market basket of consumer goods and services.
   D) prices paid by all businesses for a fixed market basket of production resources.
   E) prices paid by consumers and businesses for a fixed market basket of goods and services.

   Answer: A

5) The Consumer Price Index measures the average prices paid by
   A) businesses for a fixed market basket of resources.
   B) businesses for the most frequently used basket of resources.
   C) urban consumers for a fixed market basket of goods and services.
   D) urban consumers for the goods and services that most frequently change in price.
   E) businesses and consumers for a market basket of goods and services.

   Answer: C

6) For the CPI to provide an accurate measure of the prices paid by urban consumers, it is necessary to
   A) assign equal weights to all the goods and services included in the market basket surveyed so that nothing is over-weighted.
   B) have a market basket that is consistent and corresponds to what households actually purchase.
   C) have prices stated in dollars so consumers can compare what they spend.
   D) change the market basket each month to reflect the changes that consumers make.
   E) make certain that the incomes of the consumers surveyed do not change because such a change would affect the market basket of the goods and services they buy.

   Answer: B
7) The CPI is calculated by the Bureau of Labor Statistics on a frequency of every
   A) week.
   B) month.
   C) quarter.
   D) year.
   E) decade, along with the Census.
Answer: B
Topic: CPI
Skill: Level 1: Definition
Section: Checkpoint 7.1
Status: Old
AACS: Reflective thinking

8) Constructing the CPI involves which of the following stages?
   i. conducting the monthly price survey
   ii. converting the CPI to an international index
   iii. selecting CPI market basket
      A) i only
      B) ii only
      C) iii only
      D) i and iii
      E) i, ii, and iii
Answer: D
Topic: CPI, construction
Skill: Level 1: Definition
Section: Checkpoint 7.1
Status: Old
AACS: Reflective thinking

9) The Consumer Expenditure Survey measures
   A) households’ spending patterns.
   B) the wholesale price on what consumers buy so that a markup percentage can be found.
   C) the maximum price buyers will pay for a good or service.
   D) consumers’ incomes.
   E) the jobs at which consumers work.
Answer: A
Topic: CPI construction
Skill: Level 1: Definition
Section: Checkpoint 7.1
Status: Old
AACS: Reflective thinking
10) To measure the CPI, the BLS economic assistants check the prices of
   A) about 8,000 goods and services every year.
   B) about 8,000 goods and services every month.
   C) about 80,000 goods and services every month.
   D) about 80,000 goods and services every year.
   E) only the goods and services whose prices have changed every month.
Answer: C
Topic: CPI, construction
Skill: Level 1: Definition
Section: Checkpoint 7.1
Status: Old
AACSBI: Reflective thinking

11) To measure the CPI, the BLS economic assistants check the prices of
   A) all the goods and services produced in a given year.
   B) some of the consumer goods but none of the services produced in a given year.
   C) about 80,000 goods and services each month.
   D) about 80,000 goods and services each quarter.
   E) only the prices of the goods and services whose prices have changed.
Answer: C
Topic: CPI, construction
Skill: Level 1: Definition
Section: Checkpoint 7.1
Status: Old
AACSBI: Reflective thinking

12) The prices of the goods and services in the CPI market basket are collected
   A) monthly.
   B) yearly.
   C) quarterly.
   D) infrequently.
   E) only when the CPI market basket is determined by the Consumer Expenditure Survey.
Answer: A
Topic: CPI, construction
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSBI: Reflective thinking

13) The price survey of the goods contained in the CPI market basket is conducted
   A) every ten years, along with the Census.
   B) infrequently, because of its high cost.
   C) every year.
   D) monthly.
   E) every quarter.
Answer: D
Topic: CPI, construction
Skill: Level 1: Definition
Section: Checkpoint 7.1
Status: Old
AACSBI: Reflective thinking
14) The reference base period that the BLS uses to measure the CPI is
   E) 2005.

   Answer: A
   Topic: CPI, reference base period
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Reflective thinking

15) The reference base period for the CPI is
   A) the previous year.
   B) whatever the political party that is in control of Congress decides.
   C) currently 1913.
   D) currently 1982 to 1984.
   E) currently 2005.

   Answer: D
   Topic: CPI, reference base period
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Reflective thinking

16) The reference base period for the CPI has an index number of
   A) 100. B) 1. C) 0. D) 10. E) 1,000.

   Answer: A
   Topic: CPI, base period
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Reflective thinking

17) The value of the CPI for the reference base period is always
   A) 100.
   B) 0.
   C) 1.
   D) 50.
   E) None of the above, because the value of the CPI is not always the same for all reference
   base periods.

   Answer: A
   Topic: CPI, reference base period
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Reflective thinking
18) The items included in the CPI are
   A) final goods produced in the United States.
   B) final goods and services produced in the United States.
   C) goods and services consumed by the typical urban household.
   D) only goods and services produced within the current year and consumed by the typical household.
   E) goods but not services consumed by the typical urban household.

   Answer: C
   Topic: CPI, basket
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Written and oral communication

19) The Consumer Price Index market basket contains
   A) the minimal dietary requirements of an average urban household.
   B) the U.S.-produced goods and services purchased by an average urban household.
   C) the ideal calorie intake of each member of an average urban household.
   D) the goods and services purchased by an average urban household.
   E) the goods and services that the economists working for the BLS believes consumers should buy.

   Answer: D
   Topic: CPI, basket
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Reflective thinking

20) The Consumer Price Index measures the average of the prices paid by urban consumers for a _______ of consumer goods and services.

   A) random selection
   B) changing selection
   C) fixed market basket
   D) subjective selection
   E) least-cost market basket

   Answer: C
   Topic: CPI, basket
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Reflective thinking
21) The CPI market basket is determined by
   A) tax return data of households.
   B) supermarket purchases recorded by scanner technology.
   C) profit releases of the largest companies.
   D) a consumer survey.
   E) surveys asking large retail companies, such as Wal-Mart, about their sales of consumer
   goods and services.

   Answer: D

   Topic: CPI, basket
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Reflective thinking

22) For the CPI, the market basket of goods and services is modified
   A) each time the Consumer Expenditures Survey is conducted.
   B) about every 10 to 20 years.
   C) each month when the Price Survey is completed.
   D) each year to reflect changes in consumer purchasing habits.
   E) at the discretion of the President.

   Answer: A

   Topic: CPI, basket
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Reflective thinking

23) According to the CPI basket, the largest item in the households' budgets is
    A) food.
    B) housing.
    C) transportation.
    D) education.
    E) apparel.

   Answer: B

   Topic: CPI, basket
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Reflective thinking
24) What is the good or service is given the most weight in the CPI?
   A) apparel
   B) food and beverages
   C) housing
   D) transportation
   E) recreation

   Answer: C

Topic: CPI, basket
Skill: Level 1: Definition
Section: Checkpoint 7.1
Status: Old
AACSB: Reflective thinking

25) The CPI market basket
   A) contains one unit of each good purchased by the average consumer.
   B) weights the goods and services according to the budget of an average urban household.
   C) is comprised of a representative sample of the goods that the government guesses people buy.
   D) includes only goods and not services.
   E) includes only U.S.-produced goods and services.

   Answer: B

Topic: CPI, basket
Skill: Level 1: Definition
Section: Checkpoint 7.1
Status: Old
AACSB: Reflective thinking

26) The CPI market basket
   A) weights the goods and services according to the budget of an average urban household.
   B) determines the best possible way of taxing the average urban household.
   C) determines how the spending patterns of the average urban household change from month to month.
   D) determines how spending patterns change from urban household to urban household.
   E) changes from one month to the next in order to calculate the CPI.

   Answer: A

Topic: CPI, basket
Skill: Level 1: Definition
Section: Checkpoint 7.1
Status: Old
AACSB: Reflective thinking
27) When calculating the CPI, the Bureau of Labor Statistics
   A) weights the price of goods and services in the basket relative to the importance of the
      average urban household budget.
   B) sums the prices of the goods and services in the average urban household consumption
      basket.
   C) weights the price of all goods and services produced in a year within a country’s borders.
   D) multiplies by 100 the average price of goods and services in the average urban
      consumer’s basket.
   E) makes certain to weight the goods and services equally so that no one product is
      over-weighted.

   Answer: A

   Topic: CPI, basket
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSBI: Reflective thinking

28) The more money an average household spends on one specific type of good or service per
    month, the
    A) smaller the relative importance of that item in the CPI market basket.
    B) larger the relative importance of that item in the CPI market basket.
    C) costlier it will be to conduct the Consumer Expenditure Survey.
    D) less significant an increase in the price of that good or service will be for the household.
    E) more frequently its price is checked when calculating the CPI.

   Answer: B

   Topic: CPI, basket
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSBI: Reflective thinking

29) Which of the following changes would have the largest impact on the CPI?
    A) a one percent increase in the cost of housing
    B) a one percent increase in the cost of transportation
    C) a one percent increase in the cost of medical care
    D) a one percent increase in the cost of education
    E) a one percent increase in the cost of apparel

   Answer: A

   Topic: CPI, basket
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.1
   Status: New
   AACSBI: Reflective thinking
30) In 2013, the reference base period for the CPI for the nation of Wobet, a typical consumer spent $30 on potatoes and $150 on steak. Which of the following is true?
   A) The quantity of steak in the basket is larger than the quantity of potatoes.
   B) The quantity of potatoes in the basket is larger than the quantity of steak.
   C) The quantity of the two goods in the basket is the same.
   D) We cannot say exactly how many of each good are in the basket.
   E) None of the above answers is correct.

Answer: D

Topic: CPI, basket
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: Old
AACSBB: Analytical thinking

31) In 2013, the reference base period for the CPI for the nation of Webot, a typical consumer spent $30 on potatoes and $150 on steak. If the price of steak is $15 and the price of potatoes is $1 then there are _______ units of steak and _______ units of potatoes in the CPI market basket.
   A) 30; 150
   B) 10; 30
   C) 150; 30
   D) 5; 30
   E) None of the above answers is correct.

Answer: B

Topic: CPI, basket
Skill: Level 1: Definition
Section: Checkpoint 7.1
Status: Old
AACSBB: Analytical thinking

32) Consumers in Beachland consume only two goods, sodas and DVDs. If they spend $10 on sodas and $90 on DVDs a month, how many sodas and DVDs are in their CPI market basket if the price of a soda is $1 and the price of a DVD is $9?
   A) 9 sodas and 1 DVD
   B) 1 soda and 9 DVDs
   C) 10 sodas and 9 DVDs
   D) 10 sodas and 10 DVDs
   E) It is impossible to determine the market basket without information on the quantity of at least one of the two goods consumed.

Answer: D

Topic: CPI, basket
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: Old
AACSBB: Analytical thinking
33) When the price of, say, a package of rice changes, what must the BLS do next?
   A) immediately incorporate the new price into the CPI
   B) determine if the new price is consistent with other price changes for the period
   C) determine if the size, quality, weight, or packing of the rice has changed and adjust the
      price accordingly
   D) ignore the price change
   E) immediately incorporate the new price into the CPI only if the price has fallen

   Answer: C

34) The formula for the CPI is
   A) (Cost of CPI market basket at current period prices ÷ Cost of CPI market basket at next
      year’s prices) × 100.
   B) (Cost of CPI market basket at current period prices + Cost of CPI market basket at base
      period prices) × 100.
   C) (Cost of CPI market basket at base period prices ÷ Cost of CPI market basket at current
      period prices) × 100.
   D) (Cost of CPI market basket this year × Cost of CPI market basket at base period prices) ÷
      100.
   E) (Cost of CPI market basket this year × Cost of CPI market basket at base period prices) ×
      100.

   Answer: B

35) The formula for the CPI is
   A) (Cost of CPI market basket at base period prices ÷ Cost of CPI market basket at current
      period prices) × 100.
   B) (Cost of CPI market basket at current period prices − Cost of CPI market basket at base
      period prices) × 100.
   C) (Cost of CPI market basket at base period prices − Cost of CPI market basket at current
      period prices) × 100.
   D) (Cost of CPI market basket at current period prices ÷ Cost of CPI market basket at base
      period prices) × 100.
   E) (Cost of CPI market basket at current period prices + Cost of CPI market basket at base
      period prices) × 100.

   Answer: D
36) Each month the CPI is calculated by
   A) recording the new prices and making no other calculation.
   B) multiplying the current cost of the CPI market basket by the base period cost and then dividing by 100.
   C) subtracting the base period cost of the CPI market basket from the current cost and then dividing by 100.
   D) dividing the current cost of the CPI market basket by the base period cost and then multiplying by 100.
   E) subtracting the current period cost of the CPI market basket from the base period cost and then multiplying by 100.

Answer: D

37) The table above gives the CPI for a nation. Based on the table, we can determine that the reference base period is
   A) 1994.
   B) 1996.
   D) 2002.
   E) More information about when the Consumer Expenditure Survey was undertaken is needed to answer the question.

   Answer: C

38) If the cost of the CPI market basket at current period prices is $1000 and the cost of the CPI market basket at base period prices is $250, the CPI is
   A) 4.0.  B) 400.  C) 250.  D) 100.  E) 2.50.

   Answer: B
39) To find the cost of the CPI market basket in the base period prices we have to multiply the
   A) quantities in the CPI market basket by the base period prices.
   B) quantities in the CPI market basket by the current period prices.
   C) current period quantities in the CPI market basket by the base period prices.
   D) current period quantities in the CPI market basket by the current period prices.
   E) quantities in the CPI market basket by the base period prices and then multiply by 100.

Answer: A

Topic: Measuring the CPI
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSB: Reflective thinking

40) To find the cost of the CPI market basket in the current period we have to multiply the
   A) quantities in the CPI market basket by the base period prices.
   B) quantities in the CPI market basket by the current period prices.
   C) current period quantities in the CPI market basket by the base period prices.
   D) current period quantities in the CPI market basket by the current period prices.
   E) quantities in the CPI market basket by the base period prices and then multiply by 100.

Answer: B

Topic: Measuring the CPI
Skill: Level 1: Definition
Section: Checkpoint 7.1
Status: Old
AACSB: Reflective thinking

41) When the cost of the CPI market basket increases from one year to the next, we know that
   A) on the average, current prices are less than past year prices.
   B) the quantities of the goods and services contained in the CPI market basket have increased on the average.
   C) the prices of the goods and services contained in the CPI market basket have increased on the average.
   D) on the average, current prices are below base year prices.
   E) either the quantities of the goods and services contained in the CPI market basket have increased on the average and/or the prices of the goods and services contained in the CPI market basket have increased on the average.

Answer: C

Topic: Measuring the CPI
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking
42) If the prices of the goods and services contained in the CPI market basket increase from the base period to the next year, we know that
   A) the inflation rate is falling.
   B) the next year’s CPI will be above 100.
   C) the next year’s CPI will be below 100.
   D) the cost of the CPI market basket at next year’s prices is lower than the cost of the CPI market basket at base period prices.
   E) the market basket used by the BLS must be changed next year to reflect consumers’ new expenditures.
Answer: B

43) If the cost of the CPI market basket at current period prices is $275 and the cost of the CPI market basket at base period prices is $350, the CPI is
Answer: A

44) Suppose the CPI for this year is 133.7. This number means that
   A) on average, goods cost $133.70 each this year.
   B) prices rose 33.7 percent over the last year.
   C) prices rose 133.7 percent over the base year.
   D) prices rose 33.7 percent over the base year.
   E) prices rose 133.7 percent over the last year.
Answer: D
45) Suppose that the cost of the CPI basket of goods and services rises from $137 in 2010, which is the base year, to $159 in 2011. The CPI in 2011 is _______ and the inflation rate from 2010 to 2011 is _______.
   A) 86; 14 percent
   B) 86; 22 percent
   C) 116; 22 percent
   D) 116; 16 percent
   E) There is not enough information to answer this question.

Answer: C

Topic: CPI and inflation rate
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: New
AACSB: Analytical thinking

46) Suppose that last year, the price of strawberries was $2 and the price of milk was $1. This year, the price of milk is $2 and the price of strawberries is $1. Which of the following statements is true?
   A) The CPI does not change because the change in the two prices is the same.
   B) The CPI increases because milk is more expensive.
   C) The CPI decreases because strawberries are cheaper.
   D) The CPI might increase or decrease depending on the quantities in the CPI market basket.
   E) The change in the CPI depends how the market basket changed between the two years.

Answer: D

Topic: Measuring the CPI
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

47) Suppose that the CPI basket contains only 40 heads of cauliflower and 60 bunches of broccoli. If the price of cauliflower goes down by $1 per head and the price of broccoli goes up by $1 per bunch, then
   A) the CPI does not change.
   B) the CPI increases.
   C) the CPI decreases.
   D) the CPI might increase or decrease depending how the quantities are affected by the price changes.
   E) There is not enough information to answer this question.

Answer: B

Topic: Measuring the CPI
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: New
AACSB: Analytical thinking
48) In a small, agricultural nation, consumers buy only steak and potatoes. In 2009, the base year, the typical consumer spent $potatoes on strawberries and $100 on steak. The price of potatoes is $1 and the price of steak is $2 in 2009. In 2009, the price of potatoes is $2 and the price of steak is $1. The CPI for 2010 is

A) 80.
B) 125.
C) 100.
D) 110.
E) 25 percent.

Answer: C

Topic: CPI
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

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<tbody>
<tr>
<td>Salt</td>
<td>2</td>
<td>$1.00</td>
<td>$2.00</td>
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<tr>
<td>Bread</td>
<td>20</td>
<td>$2.50</td>
<td>$3.00</td>
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</table>

49) The data in the table above shows the consumption by families in a small (poor) economy. The families consume only salt and bread. The reference base period is 2011. The cost of the CPI market basket in 2011 is

A) $64.00. B) $3.50. C) $52.00. D) $5.00. E) 100.

Answer: C

Topic: CPI, basket
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

50) The data in the table above shows the consumption by families in a small (poor) economy. The families consume only salt and bread. The reference base period is 2011. The cost of the CPI market basket in 2010 is

A) $5.00. B) $64.00. C) $8.50. D) $52.00. E) unable to be calculated because information is needed about the quantities purchased in 2010.

Answer: B

Topic: CPI, basket
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking
51) The data in the table above shows the consumption by families in a small (poor) economy. The families consume only salt and bread. The reference base period is 2011. The CPI in 2011 is

A) 100.  B) 94.2.  C) 106.2.  D) 124.  E) 140.5.

Answer: A

Topic: Measuring the CPI
Skill: Level 4: Applying models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

52) The data in the table above shows the consumption by families in a small (poor) economy. The families consume only salt and bread. The reference base period is 2011. The CPI in 2012 is

A) 100.  B) 118.8  C) 123.1  D) 23.1  E) 18.8

Answer: C

Topic: Measuring the CPI
Skill: Level 4: Applying models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

53) The data in the table above shows the consumption by families in a small (poor) economy. The families consume only salt and bread. The reference base period is 2011. The inflation rate between 2011 and 2012 is

A) 52.5 percent.  B) 123.1 percent.  C) 23.1 percent.  D) 18.8 percent.  E) 118.8 percent.

Answer: C

Topic: Inflation
Skill: Level 4: Applying models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

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<td>400</td>
<td>$1.00</td>
<td>400</td>
<td>$1.02</td>
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<tr>
<td>CDs</td>
<td>200</td>
<td>$15.00</td>
<td>200</td>
<td>$15.90</td>
</tr>
</tbody>
</table>

54) Consumers in a country buy only two goods, pens and CDs. The prices and quantities purchased by urban households are in the table above. If 2011 is the reference base year, the cost of the CPI market basket in the base year is


Answer: A

Topic: Measuring the CPI
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking
55) Consumers in a country buy only two goods, pens and CDs. The prices and quantities purchased by urban households are in the table above. The reference base year is 2011. If the current year is 2012, the cost of the CPI market basket in 2012 is

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<td>Sneakers</td>
<td>2</td>
<td>$55</td>
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<td>$60</td>
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<tr>
<td>Manicures</td>
<td>1</td>
<td>$35</td>
<td>1</td>
<td>$40</td>
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Answer: B

Topic: Measuring the CPI
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

56) Consumers in a country buy only two goods, sneakers and manicures. The prices and quantities purchased by urban households are in the table above. The reference base year is 2011. For these data, the CPI for 2012 is


Answer: E

Topic: Measuring the CPI
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

57) Consumers in a country buy only two goods, sneakers and manicures. The prices and quantities purchased by urban households are in the table above. The reference base year is 2011. For these data, the CPI for 2011 is


Answer: B

Topic: Measuring the CPI
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking
58) Consumers in a country buy only two goods, sneakers and manicures. The prices and quantities purchased by urban households are in the table above. The reference base year is 2011. The inflation rate between 2011 and 2012 is
  A) $15.
  B) 15.0 percent.
  C) $10.
  D) 10.3 percent.
  E) 9.0 percent.
Answer: D

Topic: Inflation
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

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<td>Magazines</td>
<td>400</td>
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<td>450</td>
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<tr>
<td>Movie tickets</td>
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<tr>
<td>Pizzas</td>
<td>100</td>
<td>$10.00</td>
<td>120</td>
<td>$10.50</td>
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</tbody>
</table>

The data in the table above shows the consumption by families in an economy. The year 2013 is the reference base period.

59) Based on the table above, the cost of the base period market basket in the base period is
Answer: A

Topic: Measuring the CPI
Skill: Level 4: Applying models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

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<tr>
<td>Bags of popcorn</td>
<td>2</td>
<td>$3.00</td>
<td>$3.00</td>
</tr>
<tr>
<td>Cups of Mt. Dew</td>
<td>4</td>
<td>$1.00</td>
<td>$1.50</td>
</tr>
</tbody>
</table>

60) The information in the above table gives the 2000 base period market basket and prices used to construct the CPI for a small nation. The table also has 2010 prices. What is the value of the CPI for the base period 2000?
  A) 140  B) 133  C) 100  D) 75  E) 30
Answer: C

Topic: Measuring the CPI
Skill: Level 4: Applying models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking
61) The information in the above table gives the 2000 base period market basket and prices used to construct the CPI for a small nation. The table also has 2010 prices. What is the value of the CPI for 2010?

A) 140  
B) 133  
C) 100  
D) 71.4  
E) 142

Answer: A

Topic: Measuring the CPI
Skill: Level 4: Applying models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

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<td>Pizzas</td>
<td>100</td>
<td>$10.00</td>
<td>120</td>
<td>$10.50</td>
</tr>
</tbody>
</table>

The data in the table above shows the consumption by families in an economy. The year 2013 is the reference base period.

62) Based on the table above, the cost of the base period market basket in 2013 is

A) $3,300.  
B) $4,885.  
C) $4,650.  
D) $3,885.  
E) None of the above answers is correct.

Answer: A

Topic: Measuring the CPI
Skill: Level 4: Applying models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

63) Based on the table above, the CPI for 2013 is

A) 100.  
B) 98.5.  
C) 102.5.  
D) 5.0%.  
E) 105.1.

Answer: A

Topic: Measuring the CPI
Skill: Level 4: Applying models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking
64) Based on the table above, the CPI for 2014 is
   A) 98.5.  
   B) 105.1.  
   C) 102.5.  
   D) 5.0 percent.  
   E) 100.

Answer: A

Topic: Measuring the CPI
Skill: Level 4: Applying models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

65) Based on the table above, between 2013 and 2014, the inflation rate in this country was
   A) -1.5 percent.  
   B) 105.1 percent.  
   C) 2.5 percent.  
   D) 98.5 percent.  
   E) -2.5 percent.

Answer: A

Topic: Inflation rate
Skill: Level 4: Applying models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

66) A country reports the total expenditures on the fixed CPI basket for the past three years. The cost of the CPI basket in 2010 was $23,000, the cost of the CPI basket for the reference base period, 2011, was $23,805, and the cost of the CPI basket in 2012 was $24,500. The CPI for 2010 is
   A) 96.6.  
   B) 100.0.  
   C) 103.5.  
   D) 106.5.  
   E) 23.0.

Answer: A

Topic: Measuring the CPI
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

67) A country reports the total expenditures on the fixed CPI basket for the past three years. The cost of the CPI basket in 2010 was $23,000, the cost of the CPI basket for the reference base period, 2011, was $23,805, and the cost of the CPI basket in 2012 was $24,500. The CPI for 2012 is
   A) 93.9.  
   B) 97.2.  
   C) 102.9.  
   D) 106.5.  
   E) 245.0.

Answer: C

Topic: Measuring the CPI
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking
68) When the CPI rises ________, the inflation rate is ________.
   A) steadily; zero
   B) rapidly; high
   C) slowly; high
   D) rapidly; low
   E) rapidly; either high, low, or zero depending on whether production of output is increasing, decreasing, or not changing.
   Answer: B
   Topic: CPI and inflation rate
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Analytical thinking

69) The inflation rate is the
   A) percentage change in the composition of the CPI market basket from the base year to the next year.
   B) percentage change in the CPI from one year to the next year.
   C) difference between the current period CPI and the base period CPI.
   D) difference between the base period CPI and the current period CPI.
   E) difference in the price level from one year to the next multiplied by 100.
   Answer: B
   Topic: Inflation
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Reflective thinking

70) The inflation rate measures the
   A) average price of the goods and services consumed by urban consumers.
   B) percentage change in the CPI from one year to the next year.
   C) cost of the CPI market basket at current period prices divided by the cost of the CPI market basket at base period prices.
   D) percentage change in the quantity of goods and services consumed by urban consumers.
   E) cost of the CPI market basket at base period prices divided by the cost of the CPI market basket at current period prices.
   Answer: B
   Topic: Inflation
   Skill: Level 1: Definition
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Reflective thinking
71) Which of the following formulas is used to calculate the inflation rate?

A) inflation rate = 100 × \( \frac{\text{CPI in current year}}{\text{CPI in base period}} \)

B) inflation rate = 100 × \( \frac{\text{CPI in previous year}}{\text{CPI in current year}} \)

C) Inflation rate = 100 × \( \frac{\text{CPI in current year} - \text{CPI in previous year}}{\text{CPI in previous year}} \)

D) Inflation rate = 100 × \( \frac{\text{CPI in previous year} - \text{CPI in current year}}{\text{CPI in current year}} \)

E) inflation rate = 100 × \( \frac{\text{CPI in base year}}{\text{CPI in current year}} \)

Answer: C

Topic: Inflation
Skill: Level 1: Definition
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

72) If the CPI is 231.4 in one year and is 241.2 in the next year, then the inflation rate equals

A) \( (241.2 - 231.4) \times 100 \)

B) \( \frac{241.2 - 231.4}{231.4} \times 100 \)

C) \( \frac{241.2 - 231.4}{241.2} \times 100 \)

D) \( \frac{231.4 - 241.2}{231.4} \times 100 \)

E) \( \frac{231.4 - 241.2}{241.2} \times 100 \)

Answer: B

Topic: Inflation
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

73) If the CPI decreases from one year to the next, then the inflation rate is

A) positive.

B) above 100.

C) below 100.

D) negative.

E) 0.

Answer: D

Topic: Inflation
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking
74) Suppose in year 1 the CPI is 90, in year 2 the CPI is 100, and in year 3 the CPI is 110. Then, inflation is
   A) 100 percent in year 1.
   B) 11 percent between years 1 and 2.
   C) 11 percent between years 2 and 3.
   D) 10 percent between years 2 and 3.
   E) Both answers B and D are correct.
   Answer: B
   Topic: Inflation
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Analytical thinking

75) A country’s CPI was 84.5 last year and 100.0 this year. The inflation rate was
   A) 84.5 percent.
   B) 18.3 percent.
   C) 15.5 percent.
   D) 7.29 percent.
   E) -18 percent.
   Answer: B
   Topic: Inflation
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Analytical thinking

76) If the CPI this year is 240 and the CPI in the previous year was 200, what is the annual inflation rate?
   A) 40.0 percent
   B) 20.0 percent
   C) 50 percent
   D) 16.7 percent.
   E) -16.7 percent
   Answer: B
   Topic: Inflation
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.1
   Status: Old
   AACSB: Analytical thinking
77) The CPI was 170 last year and is 190 this year. What is the inflation rate between these two years?
   A) 10.5 percent
   B) 20 percent
   C) 11.8 percent
   D) 18 percent
   E) 15.0 percent

Answer: C

Topic: Inflation
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSBB: Analytical thinking

78) In the current year, the CPI is 122 and during the previous year the CPI was 115. The inflation rate between these years is
   A) 5.7 percent.
   B) 6.1 percent.
   C) -5.7 percent.
   D) -6.1 percent.
   E) 1.61 percent.

Answer: B

Topic: Inflation
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSBB: Analytical thinking

79) In the current year, the CPI is 160 and during the previous year the CPI was 181. The inflation rate between these years is
   A) 11.6 percent.
   B) 13.1 percent.
   C) -11.6 percent.
   D) -13.1 percent
   E) -013.1 percent.

Answer: C

Topic: Inflation
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSBB: Analytical thinking

80) The inflation rate between last year and this year was 14 percent. The CPI was 118 this year. What was the CPI last year?
   A) 104.0       B) 103.5         C) 104.5       D) 105.0       E) 103.0

Answer: B

Topic: Inflation
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: New
AACSBB: Analytical thinking
81) If the price index last year was 100 and today it is 167, what is the inflation rate over this period?
   A) -67 percent
   B) -6.7 percent
   C) 33 percent
   D) 67 percent
   E) 167 percent

Answer: D  
Topic: Inflation
Skill: Level 1: Definition
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

82) If the current period has a CPI of 143, then the amount of inflation since the base period is
   A) 143 percent.
   B) 43 percent.
   C) 57 percent.
   D) 157 percent.
   E) unknown without knowing the base period's CPI.

Answer: B  
Topic: Inflation and the price level
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

83) Suppose a report from the Bureau of Labor Statistics states that the CPI for the year 2012 was
   152. What is the percentage point increase in the prices of the goods and services since the
   reference base period?
   A) 152 percent
   B) 52 percent
   C) 100 percent
   D) 48 percent
   E) 252 percent

Answer: B  
Topic: Inflation
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking
84) If in Switzerland in January, 2009 the CPI was 187.4 and in January, 2010 it was 191.1, then the inflation rate in 2010 was
  A) 1.9 percent.
  B) 3.7 percent.
  C) –1.9 percent.
  D) unknown without the base period index number.
  E) unknown without the real prices.

Answer: A

85) The CPI for 2012 was 121, and for 2013 it was 132. What was the inflation rate between 2012 and 2013?
  A) 9.09 percent
  B) 11 percent
  C) 10 percent
  D) 8.3 percent
  E) 121.0 percent

Answer: A

86) Looking at the annual inflation rates in the United States from 2000 to 2013, we see that they
  A) were above 10 percent throughout the period.
  B) were at or below 5 percent throughout the period and was negative for a year.
  C) started low, but increased to over 9 percent by the end of the period.
  D) started out above 10 percent but fell to 5 percent by the end of the period.
  E) were negative for most of the years during this period.

Answer: B
87) In the United States between 1973 and 2013, the inflation rate
   A) increased every year.
   B) only decreased during the late 1990s.
   C) only increased during the late 1970s and 1980.
   D) peaked during the late 1970s and 1980 and was at its generally lowest in the 1990s and 2000s.
   E) has been relatively constant at approximately 4 percent to 6 percent per year.
Answer: D

88) Looking at the historical values for annual inflation in the United States as measured by the Consumer Price Index, it is clear that inflation was
   A) higher on average during the 1990s than during the 1970s.
   B) higher on average during the 2000s than during the 1970s.
   C) never less than 0 percent at any time during the last 50 years.
   D) higher on average during the 1970s than during the 1980s.
   E) was never greater than 10 percent at any time during the last 50 years.
Answer: D

89) Since 1305, of the following centuries the inflation rate has been the highest during the
   A) 17th century.
   B) 16th century.
   C) 20th century.
   D) 14th century.
   E) 15th century.
Answer: C
90) If we look back at inflation data since 1300, we see that
   A) during the 20th century we have finally solved the problem of high inflation.
   B) the Industrial Revolution caused the highest inflation rates.
   C) the discovery of America caused prices to fall drastically.
   D) inflation has been highest in the 20th and 21st centuries.
   E) the most rapid inflation occurred prior to 1600.

Answer: D

91) According to the historical record of inflation since the 1300s, the inflation rate
   A) became highest in the twentieth century.
   B) was at its lowest after Columbus arrived to America.
   C) was at its highest during the Industrial Revolution.
   D) has always been consistently high.
   E) was higher in the 1300s than in the 1900s.

Answer: A

92) Since 1300, the inflation rate has been greater than 2 percent per year and reaching its highest peaks
   A) primarily before 1400.
   B) primarily between 1400 and 1500.
   C) primarily between 1500 and 1700.
   D) primarily between 1700 and 1900.
   E) primarily after 1900.

Answer: E
93) The Consumer Price Index (CPI) measures
A) the prices of a few consumer goods and services.
B) the prices of those consumer goods and services that increased in price.
C) the average of the prices paid by urban consumers for a fixed market basket of goods and services.
D) consumer confidence in the economy.
E) the average of the costs paid by businesses to produce a fixed market basket of consumer goods and services.

Answer: C

Topic: CPI
Skill: Level 1: Definition
Section: Checkpoint 7.1
Status: Old
AACSBB: Reflective thinking

94) The CPI is reported once every
A) year.
B) quarter.
C) month.
D) week.
E) other year.

Answer: C

Topic: CPI
Skill: Level 1: Definition
Section: Checkpoint 7.1
Status: Old
AACSBB: Reflective thinking

95) If a country had a CPI of 105.0 last year and a CPI of 102.0 this year, then
A) the average prices of goods and services increased between last year and this year.
B) the average prices of goods and services decreased between last year and this year.
C) the average quality of goods and services decreased between last year and this year.
D) there was an error when calculating the CPI this year.
E) the quantity of consumer goods and services produced decreased between last year and this year.

Answer: B

Topic: CPI
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSBB: Reflective thinking
96) The period for which the Consumer Price Index is defined to equal 100 is called the
   A) reference base period.
   B) base period.
   C) starting point.
   D) zero period.
   E) beginning period.
Answer: A

97) In the United States, the good or service given the most weight in the CPI basket when
calculating the CPI is
   A) food and beverages.
   B) taxes.
   C) housing.
   D) medical care.
   E) recreation.
Answer: C

98) Suppose the market basket of consumer goods and services costs $180 using the base period
prices, and the same basket of goods and services costs $300 using the current period prices.
The CPI for the current year period equals
   A) 166.7.
   B) 66.7.
   C) 160.0.
   D) 60.0.
   E) 300.0.
Answer: A

99) Suppose the CPI last year was 82.3 and this year is 90.9. Based on this information, we can
calculate that the inflation rate in 1981 was
   A) 10.4 percent.
   B) 8.6 percent.
   C) 90.9 percent.
   D) 82.3 percent.
   E) 9.09 percent.
Answer: A
100) In the United States, the inflation rate since 1999 generally was
   A) higher than between 1979 to 1981.
   B) higher than in the 1980s.
   C) lower than between 1979 to 1981.
   D) much higher than between 1985 to 1995.
   E) negative.
   Answer: C

Topic: Recent inflation
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSBD: Reflective thinking

7.2 The CPI and Other Price Level Measures

1) If we compare the CPI to a perfect cost of living index, we find that they are
   A) the same thing.
   B) different because the cost of living has nothing to do with prices.
   C) different because the CPI does not measure prices.
   D) different because the CPI uses a fixed basket and has some measurement difficulties.
   E) not the same because the CPI has a fixed reference base period.
   Answer: D

Topic: CPI versus cost of living index
Skill: Level 1: Definition
Section: Checkpoint 7.2
Status: Old
AACSBD: Reflective thinking

2) Economists agree that the CPI
   A) is a near perfect measure of the cost of living.
   B) has no relation to the cost of living.
   C) is a possibly biased measure of the cost of living.
   D) almost always shows the cost of living rising less rapidly than is the case in reality.
   E) overstates inflation by about 4.1 percentage points a year.
   Answer: C

Topic: CPI versus cost of living index
Skill: Level 1: Definition
Section: Checkpoint 7.2
Status: Old
AACSBD: Reflective thinking
3) When economists speak of the CPI bias, they are referring to
   A) the tendency for the CPI to overstate price changes.
   B) the tendency for the CPI to understate price changes.
   C) the tendency for the CPI to understate inflation.
   D) errors in measuring the prices used in the CPI.
   E) the tendency for government officials to impose their values on the data.

   Answer: A

   Topic: CPI bias
   Skill: Level 1: Definition
   Section: Checkpoint 7.2
   Status: Old
   AACSB: Reflective thinking

4) Which of the following is NOT a source of bias in the CPI?
   i. quality change bias
   ii. new goods bias
   iii. quantity change bias
       A) i only       B) ii only       C) iii only       D) i and ii     E) ii and iii

   Answer: C

   Topic: CPI bias
   Skill: Level 1: Definition
   Section: Checkpoint 7.2
   Status: Old
   AACSB: Reflective thinking

5) Which of the following makes the Consumer Price Index a less accurate measure of the cost of living?
   i. The monthly price survey conducted to collect information about prices is very unreliable.
   ii. The existence of a new goods bias in the calculation of the CPI
   iii. The existence of a quality change bias in the calculation of the CPI

       A) i only     B) ii only       C) ii and iii    D) i and ii     E) i, ii, and iii

   Answer: C

   Topic: CPI bias
   Skill: Level 1: Definition
   Section: Checkpoint 7.2
   Status: Old
   AACSB: Reflective thinking
6) Which of the following is a bias in the CPI?
   i. new goods bias
   ii. index change bias
   iii. commodity substitution bias
      A) i only
      B) ii only
      C) iii only
      D) i and iii
      E) i, ii, and iii
   Answer: D
   Topic: CPI bias
   Skill: Level 1: Definition
   Section: Checkpoint 7.2
   Status: Old
   AACSB: Reflective thinking

7) The CPI is biased because it
   A) takes into account the changes in product quality.
   B) takes into account the changes in technology.
   C) does not always take into account the changes in product quality.
   D) accurately measures the cost of living but not the cost of producing.
   E) does not include services.
   Answer: C
   Topic: CPI bias
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.2
   Status: Old
   AACSB: Reflective thinking

8) If the CPI is used as a cost of living index, incomes that are adjusted to reflect the changes in the CPI will
   A) increase by more than the actual change in the cost of living.
   B) decrease by more than the actual change in the cost of living.
   C) increase by more than the actual change in quantities.
   D) decrease by more than the actual change in quantities.
   E) generally rise by about 2 percent a year because the standard of living generally rises by about 2 percent a year.
   Answer: A
   Topic: CPI bias
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.2
   Status: Old
   AACSB: Reflective thinking
9) The presence of new goods that are of higher quality than the old goods leads the BLS to
   A) update the market basket every time a new good is available.
   B) do nothing because at least some people still buy the old goods.
   C) try to separate price differences from improvements in quality.
   D) actually understate the cost of living when calculating the CPI.
   E) immediately update the reference base period used in calculating the CPI.

   Answer: C
   Topic: CPI bias, new goods
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.2
   Status: Old
   AACSBe: Reflective thinking

10) When a good gets better from one year to the next, the CPI has a what is called
    A) new goods bias.
    B) quality change bias.
    C) commodity substitution bias.
    D) outlet substitution bias.
    E) magnitude of change bias.

    Answer: B
    Topic: CPI bias, quality change
    Skill: Level 2: Using definitions
    Section: Checkpoint 7.2
    Status: Old
    AACSBe: Reflective thinking

11) An example of the quality change bias, and not a new goods bias, in the calculation of the CPI
    is a price increase in
    A) Coke versus Pepsi.
    B) DVDs purchased on Craigslist, an online classified website.
    C) a 2013 GPS unit versus a 2008 GPS unit.
    D) etexts versus used books.
    E) pants purchased by a first-time shopper at Aeropostale.

    Answer: C
    Topic: CPI bias, quality change
    Skill: Level 2: Using definitions
    Section: Checkpoint 7.2
    Status: Old
    AACSBe: Reflective thinking
12) The quality change bias is most likely to put _______ into the CPI and so _______ the inflation rate.
   A) a downward bias; understate
   B) an upward bias; understate
   C) an upward bias; overstate
   D) a downward bias; overstate
   E) a random bias; randomly overstate or understate

Answer: C

13) When discussing the CPI, the term "commodity substitution bias" refers to changes in
   A) prices that lead business to change the items they buy.
   B) quantities that lead households to change the items they buy.
   C) prices that lead households to change the items they buy.
   D) income that lead households to change the items they buy.
   E) stores so that consumers switch from one store to another.

Answer: C

14) The commodity substitution bias is most likely to put _______ into the CPI and so _______ the inflation rate.
    A) a downward bias; understate
    B) an upward bias; understate
    C) an upward bias; overstate
    D) a downward bias; overstate
    E) a random bias; randomly overstate or understate

Answer: C
15) The CPI overstates inflation because the average consumer buys
   A) the same basket of goods every week.
   B) more of those goods whose relative price has risen.
   C) less of those goods whose relative price has risen.
   D) lower quality goods if they have a choice.
   E) a generally random assortment of goods and services each week because what is
       purchased depends on what the consumer needs.

   Answer: C

   Topic: CPI bias, commodity substitution bias
   Skill: Level 1: Definition
   Section: Checkpoint 7.2
   Status: Old
   AACSB: Reflective thinking

16) In constructing the CPI, the BLS has to deal with commodity substitution bias, which is
    defined as
    A) consumers’ substitution of discount stores for full service stores to avoid the higher
       prices in the full service stores.
    B) consumers’ substitution of cheaper goods for goods whose prices increase.
    C) the bias from quality changes in existing products that cause prices to increase.
    D) the bias from new goods being introduced that are more expensive than older goods.
    E) the bias that arises because the BLS changes the CPI market basket each month.

   Answer: B

   Topic: CPI bias, commodity substitution bias
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.2
   Status: Old
   AACSB: Reflective thinking

17) The fact the consumers substitute one good for another when prices change is
    A) taken into account by the fixed market basket used in calculating the CPI.
    B) not taken into account by the fixed market basket used in calculating the CPI.
    C) not important to economists.
    D) a reason why the CPI is used to calculate inflation rates.
    E) a reason why the CPI understates the actual change in the cost of living.

   Answer: B

   Topic: CPI bias, commodity substitution bias
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.2
   Status: Old
   AACSB: Reflective thinking
18) When the price of broccoli increase relative to cauliflower, people who buy fresh vegetables respond by buying more cauliflower and fewer broccoli. As a result, the CPI has
   A) a new goods bias.
   B) a quality change bias.
   C) a commodity substitution bias.
   D) an outlet substitution bias.
   E) a new price bias.
Answer: C

Topic: CPI bias, commodity substitution bias
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: Old
AACS: Reflective thinking

19) Suppose the Bureau of Labor Statistics uses Ballpark Franks as the hot dogs used when calculating the consumer price index. During 2012, Oscar Mayer aggressively reduces prices. Consumers respond by purchasing more Oscar Mayer and less Ballpark Franks. The 2012 CPI is likely to
   A) overstate the average prices paid by consumers.
   B) overstate the average prices paid by businesses.
   C) understate the average prices paid by consumers.
   D) understate the average prices paid by businesses.
   E) neither understate nor overstate the average prices because some consumers will still buy Ballpark Franks.
Answer: A

Topic: CPI bias, commodity substitution bias
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: Old
AACS: Reflective thinking

20) An example of the commodity substitution bias in the calculation of the CPI is a price increase in
   A) turkey when the price of chicken doesn’t rise.
   B) a GPS unit versus a AAA map book.
   C) a 2014 Toyota Camry versus a 2005 Honda Civic.
   D) etexts versus used books bought through Craigslist.
   E) new homes because people’s incomes have increased.
Answer: A

Topic: CPI bias, commodity substitution bias
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: Old
AACS: Reflective thinking
21) Suppose higher prices lead consumers to switch from shopping at Abercrombie & Fitch to shopping at Wal-Mart. If the CPI does not reflect this change, it is referred to as
A) a new goods bias.
B) a quality change bias.
C) an outlet substitution bias.
D) a new price bias.
E) store bias.
Answer: C

Topic: CPI bias, outlet substitution bias
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: Old
AACSB: Reflective thinking

22) If higher prices cause buyers to shop at discount stores, the CPI has
A) a new goods bias.
B) a quality change bias.
C) a commodity substitution bias.
D) an outlet substitution bias.
E) a discounted bias.
Answer: D

Topic: CPI bias, outlet substitution bias
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: Old
AACSB: Reflective thinking

23) The outlet substitution bias is most likely to put _______ and so _______ the inflation rate.
A) a downward bias into the CPI; understate
B) an upward bias into the CPI; understate
C) an upward bias into the CPI; overstate
D) a downward bias into the CPI; overstate
E) no bias into the CPI because it is such a small effect; have no effect on
Answer: C

Topic: CPI bias, outlet substitution bias
Skill: Level 1: Definition
Section: Checkpoint 7.2
Status: Old
AACSB: Reflective thinking
24) An example of the outlet substitution bias in the calculation of the CPI is a price increase in
   A) GPS units versus AAA map books.
   B) olive oil versus vegetable oil.
   C) a 2014 Honda Civic relative to a 2004 Honda Civic.
   D) textbooks bought through the campus bookstore relative to textbooks via Craigslist.
   E) a trip to Mexico for a couple that had previously taken vacations in Europe.

Answer: D

Topic: CPI bias, outlet substitution bias
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: Old
AACS B: Reflective thinking

25) Which of the following statements about the CPI is (are) correct?
   i. The only significant bias in the CPI is the commodity substitution bias.
   ii. The CPI probably overstates inflation by 1.1 percentage points a year.
   iii. As far as the bias in the CPI is concerned, the new goods bias and the outlet substitution
       biases are irrelevant.

   A) i only   B) ii only   C) iii only   D) i and iii   E) i and ii

Answer: B

Topic: CPI bias, magnitude
Skill: Level 1: Definition
Section: Checkpoint 7.2
Status: Old
AACS B: Reflective thinking

26) The bias in the CPI distorts private contracts because
   A) a future payment that is linked to the CPI is likely to be raised above the true increase in
       the price level.
   B) a worker that links her salary to the CPI is likely to be worse off than a worker that
       doesn't link her salary to the CPI.
   C) a lender that links the interest payments on the loan to the CPI is likely to be worse off
       than a lender that does not link the interest payments on the loan to the CPI.
   D) a future increase in a payment that is linked to the CPI is likely to be less than the true
       increase in the price level.
   E) the CPI cannot properly account for what goods and services a typical urban consumer
       buys.

Answer: A

Topic: CPI bias, private contracts
Skill: Level 1: Definition
Section: Checkpoint 7.2
Status: Old
AACS B: Reflective thinking
27) If a private wage contract is agreed upon with a cost of living adjustment such that wage hikes are equal to increases in the CPI,
   A) the employer benefits because wages will rise less than the change in actual prices.
   B) workers exactly keep pace with changes in the cost of living.
   C) workers benefit because the CPI increases more rapidly than does the cost of living.
   D) the CPI bias means that workers benefit if the price level rises and the employer benefits if the price level falls.
   E) the CPI bias means that workers benefit if the price level falls and the employer benefits if the price level rises.

   Answer: C

   Topic: CPI bias, private contracts
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.2
   Status: Old
   AACSB: Reflective thinking

28) Mark has a two-year wage contract with his employer. Mark’s wage contract specifies a $50,000 salary for the first year, and specifies a salary increase equal to the percentage increase in the CPI during the second year. The percentage increase in the CPI during the year was 4.0 percentage points. If the CPI overstates inflation by 1.0 percentage point, at the end of the first year Mark’s salary increased by ______ more than it would have without the upward bias.

   A) $50   B) $3000   C) $500   D) $1500   E) $2000

   Answer: C

   Topic: CPI bias, private contracts
   Skill: Level 3: Using models
   Section: Checkpoint 7.2
   Status: Old
   AACSB: Analytical thinking

29) Because a third of government outlays are linked directly to the CPI, as time passes, the CPI bias means that the government’s outlays are

   A) larger than needed to keep pace with the cost of living.
   B) smaller than needed to keep pace with the cost of living.
   C) exactly equal to the changes in the cost of living.
   D) larger than needed to keep pace with the cost of living if the CPI is falling from one year to the next, otherwise the outlays are smaller than needed to keep pace with the cost of living.
   E) smaller than needed to keep pace with the cost of living if the CPI is falling from one year to the next, otherwise the outlays are larger than needed to keep pace with the cost of living.

   Answer: A

   Topic: CPI bias, government outlays
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.2
   Status: Old
   AACSB: Reflective thinking
30) The bias in the CPI affects government outlays because the overstatement of inflation
   A) increases fiscal pressure.
   B) increases government outlays by more than what is justified.
   C) decreases social welfare benefits.
   D) decreases government outlays by more than what is justified.
   E) means that tax receipts are less than what is needed to cover government outlays.
Answer: B

31) Because the CPI overstates inflation,
   A) when wages are linked to the CPI, workers’ wages become too low as time passes.
   B) as time passes, government payments are increasingly lower than intended.
   C) as time passes, government outlays are increased by more than necessary to compensate
      for inflation.
   D) workers do not receive adequate compensation for price changes.
   E) most contracts use the GDP deflator to measure inflation.
Answer: C

32) Between the base period and the next period, prices stay constant. The GDP price index in the
    next period
   A) cannot be calculated without knowing how much the quantity changed.
   B) will equal 0 because there is no change.
   C) is equal to 100 because there is no change.
   D) is equal to 1 because there is no change.
   E) is equal to 50 because there is no change.
Answer: C
33) The GDP deflator is
   A) a measure of the level of production.
   B) always greater than 100.
   C) the price level during the base year.
   D) a measure of the price level.
   E) equal to nominal GDP during the base year.

Answer: D

34) The GDP deflator measures
   A) the price level.
   B) the quantity level.
   C) real GDP.
   D) nominal GDP.
   E) the quality of the goods and services in GDP.

Answer: A

35) If the GDP price index is 137, this value means that prices have increased
   A) 137 percent in the last year.
   B) 37 percent in the last year.
   C) 37 percent since the base year.
   D) 137 percent since the base year.
   E) 63 percent since the base year.

Answer: C
36) For the purpose of measuring the cost of living for consumers, one reason the GDP price index is NOT a good substitute for the CPI is because the GDP price index
A) compares a current year basket of goods with a base year basket of goods.
B) compares current year's prices with base year's prices.
C) includes the prices of exported goods, which are not consumed in the United States.
D) and the CPI move in the same direction over time.
E) has a larger bias than does the CPI.

Answer: C

Topic: GDP price index and the CPI
Skill: Level 1: Definition
Section: Checkpoint 7.2
Status: Old
AACSB: Reflective thinking

37) If Caterpillar Inc. raises the price of earth-moving equipment that it manufactures in Illinois, then the CPI will ________ and the GDP deflator will ________.
   A) increase; increase
   B) increase; not change
   C) not change; increase
   D) not change; not change
   E) increase; increase by less than the CPI

Answer: C

Topic: GDP price index and the CPI
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: New
AACSB: Analytical thinking

38) If the price of used cars rises, then the CPI will ________ and the GDP deflator will ________.
   A) increase; increase
   B) increase; not change
   C) not change; increase
   D) not change; not change
   E) increase; increase by more than the CPI

Answer: B

Topic: GDP price index and the CPI
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: New
AACSB: Analytical thinking
39) If the price of rocket fuel imported from Russia and used by NASA suddenly increases, then the U.S. CPI will _______ and the U.S. GDP deflator will _______.
   A) increase; increase
   B) increase; not change
   C) not change; increase
   D) not change; not change
   E) increase; increase by more than the CPI

Answer: D

Topic: GDP price index and the CPI
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: New
AACSB: Analytical thinking

40) When comparing the annual inflation rate in the United States based on the CPI with the annual inflation rate based on the PCE price index, the data show that the two inflation rates
   A) move in opposite directions.
   B) remained constant over the forty year period after 1979.
   C) steadily increased over the forty year period after 1979.
   D) move up and down in similar but not identical ways.
   E) both fluctuate, but the fluctuations have little relationship to each other.

Answer: D

Topic: PCE price index and the CPI
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: Old
AACSB: Reflective thinking

41) If we compare the last 30 years of inflation as recorded by the CPI and the PCE price index, we find that the
   A) two measures fluctuate together.
   B) CPI inflation rate has consistently been at least 5 percentage points above the PCE price index inflation rate.
   C) PCE price index inflation rate has consistently been at least 5 percentage points above the CPI inflation rate.
   D) two measures give very different inflation rates for most years.
   E) the CPI inflation rate was always positive, but the PCE price index inflation rate was frequently negative.

Answer: A

Topic: PCE price index and the CPI
Skill: Level 1: Definition
Section: Checkpoint 7.2
Status: Old
AACSB: Reflective thinking
42) When we compare the records of the CPI and the PCE price index over time, the
   A) two are very different in magnitude.
   B) PCE price index tends to exceed the CPI.
   C) CPI tends to exceed the PCE price index.
   D) two measures are identical.
   E) CPI tends to exceed the PCE price index when inflation is high, and the PCE price index
      tends to exceed the CPI when inflation is low.

Answer: C
Topic: PCE price index and the CPI
Skill: Level 1: Definition
Section: Checkpoint 7.2
Status: Old
AACS: Reflective thinking

43) When comparing the annual inflation rate in the United States based on the CPI with the
    annual inflation rate based on the PCE price index, the data show that the
    A) CPI measure tends to exceed the PCE price index measure.
    B) PCE price index measure tends to exceed the CPI measure.
    C) CPI measure and the PCE price index measure are equal.
    D) CPI measure and PCE price index measure move in opposite directions.
    E) CPI deflator and PCE price index cannot be compared because they measure prices of
       different baskets of goods and services.

Answer: A
Topic: PCE price index and the CPI
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: Old
AACS: Reflective thinking

44) All of the following can create a bias in the CPI EXCEPT the
    A) new goods bias.
    B) outlet substitution bias.
    C) commodity substitution bias.
    D) GDP price index bias.
    E) quality change bias.

Answer: D
Topic: CPI bias
Skill: Level 1: Definition
Section: Checkpoint 7.2
Status: Old
AACS: Reflective thinking
45) An example of the new goods bias in the calculation of the CPI is a price increase in
    A) butter relative to margarine.
    B) an iPod player relative to a Walkman.
    C) a 2013 Honda Civic Si Coupe relative to a 2013 Honda Civic Si Sedan.
    D) textbooks bought through the campus bookstore relative to textbooks bought through Amazon.com.
    E) a Caribbean cruise for a couple who has never been on a cruise before.

Answer: B

Topic: CPI bias, new goods
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: Old
AACSBI: Reflective thinking

46) The price of dishwashers has remained relatively constant while the quality of dishwashers has improved. The CPI
    A) is adjusted monthly to reflect the improvement in quality.
    B) is increased monthly to reflect the increased quality of dishwashers.
    C) has an upward bias if it is not adjusted to take account of the higher quality.
    D) has an upward bias because it does not reflect the increased production of dishwashers.
    E) should not take account of any quality changes because it is a price index not a quality index.

Answer: C

Topic: CPI bias, quality change
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: Old
AACSBI: Reflective thinking

47) Joe buys chicken and beef. If the price of beef rises and the price of chicken does not change, Joe will buy _______ for the CPI.
    A) more beef and create a new goods bias
    B) more chicken and create a commodity substitution bias
    C) the same quantity of beef and chicken and create a commodity substitution bias
    D) less chicken and beef and create a quality change bias
    E) more chicken and eliminate the commodity substitution bias

Answer: B

Topic: CPI bias, commodity substitution bias
Skill: Level 1: Definition
Section: Checkpoint 7.2
Status: Old
AACSBI: Reflective thinking
48) The CPI bias was estimated by the Congressional Advisory Commission on the Consumer Price Index as
   A) understating the actual inflation rate by about 5 percentage points a year.
   B) understating the actual inflation rate by more than 5 percentage points a year.
   C) overstating the actual inflation rate by about 1 percentage point a year.
   D) overstating the actual inflation rate by more than 5 percentage points a year.
   E) understating the actual inflation rate by about 1 percentage point a year.

   Answer: C

   Topic: CPI bias, magnitude
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.2
   Status: Old
   AACSB: Reflective thinking

49) A consequence of the CPI bias is that it
   A) decreases government outlays.
   B) increases international trade.
   C) reduces outlet substitution bias.
   D) distorts private contracts.
   E) means that it is impossible to measure the inflation rate.

   Answer: D

   Topic: CPI bias, private contracts
   Skill: Level 1: Definition
   Section: Checkpoint 7.2
   Status: Old
   AACSB: Reflective thinking

50) The fact that the CPI is a biased measure of the inflation rate means government outlays will
   A) increase at a faster rate than the actual inflation rate.
   B) increase at the same rate as the actual inflation rate.
   C) increase at a slower rate than the actual inflation rate.
   D) sometimes increase faster and sometimes increase slower than the actual inflation rate depending on whether the actual inflation rate exceeds 1.1 percent per year or is less than 1.1 percent per year.
   E) None of the above because the bias in inflation measured using the CPI has nothing to do with government outlays.

   Answer: A

   Topic: CPI bias, government outlays
   Skill: Level 1: Definition
   Section: Checkpoint 7.2
   Status: Old
   AACSB: Reflective thinking
51) The GDP deflator is a measure of
   A) taxes and subsidies.
   B) changes in quantities.
   C) prices.
   D) depreciation.
   E) changes in nominal GDP.

Answer: C

Topic: GDP price index
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: Old
AACSB: Reflective thinking

### 7.3 Nominal and Real Values

1) The difference between nominal and real is
   A) nominal is measured in current dollars and real is measured in dollars of a given year.
   B) real is measured in current dollars and nominal is measured in dollars of a given year.
   C) nominal is a number stated in dollars and real is stated with an index number.
   D) real is a number stated in dollars and nominal is stated with an index number.
   E) both nominal and real are measured with index numbers, only the nominal index is greater than 100 and the real index is less than 100.

Answer: A

Topic: Nominal versus real values
Skill: Level 1: Definition
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking

2) When the nominal price of a good increases over time, the real cost of buying the good
   A) must increase.
   B) decreases because income also increases over time.
   C) does not change because income also increases over time.
   D) might increase, decrease, or stay the same depending on how much the CPI changed.
   E) might increase, decrease, or stay the same depending on how much income changed.

Answer: D

Topic: Money values at different dates
Skill: Level 1: Definition
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking
3) To compare the price of a loaf of bread produced in 1993 with the price of a loaf produced in this year, you should compare the value of the bread in
   A) real prices.
   B) nominal prices.
   C) real quantity.
   D) nominal quantity.
   E) CPI quantity.
Answer: A

Topic: Money values at different dates
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACS: Reflective thinking

4) To compare the real price of gas in 1975 to the real price in 2013, we need to know
   A) just the two nominal prices in both years.
   B) the two prices in both years and the inflation rate in 2013.
   C) the two prices in both years and the CPI in both years.
   D) the two prices in both years and the two interest rates in both years.
   E) the two prices in both years and the two inflation rates in both years.
Answer: C

Topic: Money values at different dates
Skill: Level 1: Definition
Section: Checkpoint 7.3
Status: Old
AACS: Reflective thinking

5) Suppose the CPI in 1983 is 100 and the CPI this year is 172. These values for the CPI mean that
   A) inflation between the two years was 172 percent.
   B) typically, a good whose price was $100 in 1983 had a price of $172 this year.
   C) typically, a good whose price was $172 in 1983 had a price of $100 this year.
   D) typically, a good whose price was $100 in 1983 had a price of $139 this year.
   E) typically, a good whose price was $100 in 1983 had a price of $58 this year.
Answer: B

Topic: Money values at different dates
Skill: Level 4: Applying models
Section: Checkpoint 7.3
Status: Old
AACS: Analytical thinking
6) February 2010, the price of gasoline in the Florida was $2.629 per gallon and the CPI was 202.4 with a base period of 1982 to 1984. What was the real price of gasoline per gallon in base period dollars?
   A) $2.629 per gallon
   B) $1.00 per gallon
   C) $1.29 per gallon
   D) $5.32 per gallon
   E) $1.809 per gallon

   Answer: C
   Topic: Money values at different dates
   Skill: Level 3: Using models
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Analytical thinking

7) If the price of a soda was 15 cents in 1970, when the CPI was 50, and 50 cents in 2007 when the CPI was 172, then the real price of
   A) a soda has risen 567 percent.
   B) a soda has risen 350 percent.
   C) the 1970 soda in 2007 dollars is 52 cents.
   D) the 2007 soda in 1970 dollars is $3.44.
   E) the soda was 15 cents in 1970 and 50 cents in 2007.

   Answer: C
   Topic: Money values at different dates
   Skill: Level 3: Using models
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Analytical thinking

8) If average annual tuition at public 4-year colleges was $1,908 in 1990, when the CPI was 130.7, and $8,655 in 2012 when the CPI was 229.6, then the real cost of annual tuition
   A) rose by 158 percent during that period.
   B) rose by 354 percent during that period.
   C) rose by 75.7 percent during that period.
   D) fell by 158 percent during that period.
   E) fell by 354 percent during that period.

   Answer: A
   Topic: Money values at different dates
   Skill: Level 3: Using models
   Section: Checkpoint 7.3
   Status: New
   AACSB: Analytical thinking
9) If the price of a soda was 15 cents in 1970, when the CPI was 50, and 50 cents in 2007, when the CPI was 172, then
   A) prices on average have increased 567 percent.
   B) prices on average have increased 244 percent.
   C) the price of the soda was greater in real value in 1970 than in 2007.
   D) the price of a soda has increased a greater percentage than the CPI.
   E) the real price of a soda is the same in 1970 and 2007.

Answer: C

Topic: Money values at different dates
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSBS: Analytical thinking

10) In June 1960, the price of gasoline in the Midwest was $0.169 per gallon and the CPI was 29.6 with a base period of 1982 to 1984. What was the real price of gasoline per gallon in base period dollars?
   A) $0.05 per gallon
   B) $0.057 per gallon
   C) $0.169 per gallon
   D) $0.571 per gallon
   E) $0.296 per gallon

Answer: D

Topic: Money values at different dates
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSBS: Analytical thinking

11) In 2001, Pablo earned $200 per week at his job. In 2011, Pablo earned $240 per week. If the CPI in 2001 was 100 and the CPI in 2011 was 152, then
   A) Pablo was better off in 2011 because his weekly wage was higher.
   B) the 2001 wage measured in 2011 dollars is $157.89.
   C) the 2011 wage measured in 2001 dollars is $157.89.
   D) the 2001 wage measured in 2011 dollars is $131.58.
   E) the 2001 wage measured in 2011 dollars is $100.

Answer: C

Topic: Money values at different dates
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSBS: Analytical thinking
12) During 1990, a Hershey candy bar cost $.85. By 2007, the same Hershey candy bar cost $1.25. If the CPI was 130.7 in 1990 and 180.5 in 2007, the price of the 1990 Hershey candy bar in 2007 prices is
   A) greater than the price of the 2007 Hershey candy bar.
   B) less than the price of the 2007 Hershey candy bar.
   C) equivalent to the price of the 2007 Hershey candy bar.
   D) perhaps greater than, perhaps less, or perhaps the same depending on whether the CPI in 2007 has been adjusted to reflect 2007 prices.
   E) not able to be determined given the information in the question.

Answer: B

Topic: Money values at different dates
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSBS: Analytical thinking

13) A ham and cheese sandwich at the local deli costs $4.99 in 2005. If the CPI in 2005 was 90.0 and the CPI today is 121.0, the equivalent price for the ham and cheese sandwich today is

Answer: D

Topic: Money values at different dates
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSBS: Analytical thinking

14) If prices have increased since the base period, then
   A) real GDP is smaller than nominal GDP.
   B) real GDP is larger than nominal GDP.
   C) real GDP is equal to nominal GDP.
   D) there is no way to adjust nominal GDP so that it equals real GDP.
   E) real GDP can no longer be compared to nominal GDP.

Answer: A

Topic: Real GDP and nominal GDP
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSBS: Reflective thinking

15) If prices have decreased since the base period, then
   A) real GDP is smaller than nominal GDP.
   B) real GDP is larger than nominal GDP.
   C) real GDP is equal to nominal GDP.
   D) there is no way to adjust nominal GDP so that it equals real GDP.
   E) real GDP can no longer be compared to nominal GDP.

Answer: B

Topic: Real GDP and nominal GDP
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSBS: Reflective thinking
16) During this year, nominal GDP in Syldavia was $720 billion and real GDP was $720 billion. The GDP price index in Syldavia in this year was
   A) 0, because nominal GDP equaled real GDP.
   B) 100.
   C) 720.
   D) -1.
   E) 720 billion.
   Answer: B

Topic: Real GDP and nominal GDP
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSIT: Analytical thinking

17) Real GDP is $1,400 billion and nominal GDP is $1,800. The GDP price index equals
   A) 100.0.  B) 77.0.  C) 128.6.  D) 2.86.  E) 222.2.
   Answer: C

Topic: Real GDP and nominal GDP
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSIT: Analytical thinking

18) The GDP price index can be interpreted as
   A) (nominal GDP + real GDP) × 100.
   B) (real GDP + nominal GDP) × 100.
   C) (nominal GDP + real GDP) ÷ 100.
   D) (nominal GDP - real GDP) × 100.
   E) (real GDP - nominal GDP) ÷ 100.
   Answer: A

Topic: Real GDP and nominal GDP
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSIT: Analytical thinking

19) If for a given year nominal GDP is $2000 billion and real GDP is $1500 billion, then the GDP price index is
   A) 133.  B) 1.33.  C) 100.  D) 0.75.  E) 750.
   Answer: A

Topic: Real GDP and nominal GDP
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSIT: Analytical thinking
20) If nominal GDP is $2,000 billion and the GDP price index is 120, then real GDP is ______ billion.

A) $2,000    B) $1667    C) $16.67    D) $240    E) $6

Answer: B

Topic: Real GDP and nominal GDP
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

21) If the GDP price index is 125 and nominal GDP is $130 billion, then real GDP equals ______ billion.

A) $104.00    B) $162.50    C) $96    D) $1.04    E) $9.6

Answer: A

Topic: Real GDP and nominal GDP
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

22) Suppose that in 2012, real GDP is larger than nominal GDP. The GDP price index in 2012 is definitely

A) negative.
B) larger than the GDP price index in 2012.
C) less than the GDP price index in 2012.
D) greater than 100.
E) less than 100.

Answer: E

Topic: Real GDP and nominal GDP
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

23) The ______ is the average hourly wage rate measured in current dollars, while the ______ is the average hourly rate measured in the dollars of a given reference base year.

A) real interest rate; nominal interest rate
B) nominal wage rate; real wage rate
C) real wage rate; nominal wage rate
D) nominal interest rate; real interest rate
E) inflation rate; real wage rate

Answer: B

Topic: Nominal and real wage rates
Skill: Level 1: Definition
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking
24) In order to determine if the quantity of goods and services that an hour’s work can buy has increased or decreased between 2000 and 2012, one should compare the
   A) 2000 nominal wage with the 2012 nominal wage.
   B) 2000 real wage with the 2012 nominal wage.
   C) 2000 real wage with the 2012 real wage.
   D) 2000 nominal wage with the 2012 real wage.
   E) 2000 nominal wage with the 2012 nominal wage and the 2000 real wage because both are important factors determining if workers can buy more or fewer goods with an hour’s work.

Answer: C

Topic: Real wage
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

25) A change in the real wage rate measures the change in the
   A) price of goods and services that an hour’s work can buy.
   B) nominal wage of an hour’s work.
   C) quantity of goods and services that an hour’s work can buy.
   D) inflation rate affecting the labor market.
   E) CPI.

Answer: C

Topic: Real wage
Skill: Level 1: Definition
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking

26) Suppose that residents of France have seen their real wage rate increase over time. This means that
   A) French workers’ inflation rate has increased over time.
   B) French workers have increased their average hours of labor over time.
   C) French workers have received increases in their nominal wage rate over time.
   D) French workers have increased buying power.
   E) the CPI must have decreased over time.

Answer: D

Topic: Real wage
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking
27) The change in the quantity of goods and services that an hour's work can buy is measured by the
   A) nominal wage.
   B) real wage.
   C) CPI.
   D) real interest rate.
   E) inflation rate.
   Answer: B
   Topic: Real wage
   Skill: Level 1: Definition
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Reflective thinking

28) When firms decide how much labor to hire, one of the factors that influences them is the
   A) nominal wage rate plus the inflation rate.
   B) nominal wage rate divided by the price level and then multiplied by 100.
   C) nominal wage rate minus the inflation rate.
   D) real wage rate plus the inflation rate.
   E) nominal wage rate divided by the inflation rate and then multiplied by 100.
   Answer: B
   Topic: Real wage
   Skill: Level 1: Definition
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Reflective thinking

29) Which of the following formulas would you use to calculate the *nominal* wage rate?
   A) nominal wage rate = real wage rate + CPI
   B) nominal wage rate = real wage rate × CPI
   C) nominal wage rate = (real wage rate × CPI) ÷ 100
   D) nominal wage rate = (real wage rate × CPI) × 100
   E) nominal wage rate = (real wage rate ÷ CPI) × 100
   Answer: C
   Topic: Nominal and real wage rates
   Skill: Level 3: Using models
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Reflective thinking
30) Nominal and real wage rates
   A) must always change by the same amount.
   B) must always change in opposite directions by the same amount.
   C) must always change in the same direction but could change by different amounts.
   D) could change in opposite directions.
   E) must always change in the same direction, and the nominal wage rate must change more rapidly than the real wage rate.

Answer: D

Topic: Nominal and real wage rates
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking

31) In the United States between 1981 and 2012, the
   A) nominal wage rate increased more than the real wage rate.
   B) real wage rate increased more than the nominal wage rate.
   C) nominal and real wage rates increased the same amount.
   D) real and the nominal wage rates decreased the same amount.
   E) nominal wage rate decreased and the real wage rate increased.

Answer: A

Topic: Nominal and real wage rates
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking

32) If there is inflation and we compare the changes in a nominal variable over time versus its real counterpart, such as the nominal wage rate versus the real wage rate, we find that the
   A) two increase at about the same rate because of inflation.
   B) real wage rate increases faster because of inflation.
   C) nominal wage rate increases faster because of inflation.
   D) two decrease at about the same rate because of inflation.
   E) two change at a rate that does not depend on the inflation rate.

Answer: C

Topic: Nominal and real wage rates
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking
33) Which of the following statements about the nominal and the real wage rates is correct?
   A) The nominal wage rate equals the real wage rate divided by the CPI and then multiplied by 100.
   B) The nominal wage rate is measured in the dollars of a base year.
   C) The real wage rate is measured in current year dollars.
   D) The real wage rate indicates how many goods and services can be purchased with an hour's labor.
   E) The real wage rate equals the nominal wage rate multiplied by the CPI then divided by 100.

   Answer: D

   Topic: Nominal and real wage rates
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Reflective thinking

34) If the nominal wage is $30 in 2011 and the CPI is 202 in 2011, then the real wage in 1982–1984 dollars
   A) is $30.
   B) is $14.85.
   C) is $1.48.
   D) is $29.00.
   E) cannot be calculated without the past year wage rate.

   Answer: B

   Topic: Real wage
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Analytical thinking

35) In 2008, Cameron began his career with SBC. His starting salary was $32,000. By 2012, his salary increased to $35,000. If the CPI was 100.0 in 2008 and 107.5 in 2012, Cameron's 2012 real income is
   A) $32,000.
   B) $32,558.
   C) $34,400.
   D) $37,625.
   E) $35,000.

   Answer: B

   Topic: Real wage
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Analytical thinking
36) Your starting salary is $35,000 per year. After one year, you are given a raise that increases your nominal salary. Which of the following salaries would you prefer the most?

A) a $36,000 salary with a CPI of 103.0
B) a $38,000 salary with a CPI of 104.0
C) a $39,000 salary with a CPI of 109.0
D) a $39,000 salary with a CPI of 110.0
E) a $37,000 salary with a CPI of 106.0

Answer: B
Topic: Real wage
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

37) If you are earning $20,000 this year and the CPI is 165, your real income in base year prices is

A) $121.21.
B) $12,121.21.
C) $20,000.
D) $16,500.
E) $33,000.

Answer: B
Topic: Real wage
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

38) If your real income in base year prices is $50,000, then if the CPI is 170, what is your nominal income?

A) $29,411.76
B) $50,000.00
C) $85,000.00
D) $71,428.57
E) $70,000.00

Answer: C
Topic: Real wage
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

39) If your nominal income is $75,000 and your real income in base year prices is $60,000, what is the CPI?

A) 100          B) 125          C) 80          D) 250          E) 200

Answer: B
Topic: Real wage
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking
40) If your nominal income is $80,000 and your real income in base year prices is $71,500, what is the CPI?
A) 89  B) 100  C) 112  D) 106  E) 150
Answer: C

Topic: Real wage
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

41) Sharisse brags to her mother that her starting salary as a management trainee is $36,000, much higher than her mother’s starting salary of $21,000 as a management trainee several years ago. If the CPI the year Sharisse begins work is 181.2 and the CPI the year her mother started work was 109.1, Sharisse is
A) wrong. Adjusting for price changes, her salary is less than her mother’s salary.
B) wrong. Adjusting for quantity changes, her salary is less than her mother’s salary.
C) correct. Adjusting for price changes, her salary is more than her mother’s salary.
D) correct. Adjusting for quantity changes, her salary is more than her mother’s salary.
E) maybe wrong and maybe right. Adjusting for quantity changes, her salary is less than her mother’s salary but with the information given we are unable to further adjust for price changes.
Answer: C

Topic: Money values at different dates
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

42) In 2008, the nominal minimum wage rate was $7.25 an hour and the CPI was 200. The real minimum wage rate in 2008 was
A) $3.63 an hour.
B) $14.50 an hour.
C) $1450 an hour.
D) $26.32 an hour.
E) $7.25 an hour.
Answer: A

Topic: Real wage
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

43) In 2012, the nominal wage rate for unionized carpenters was $37.50 and the CPI was 204. Calculate the real wage rate for this group of workers.
A) $37.50  B) $47.09  C) $5.44  D) $18.38  E) $1.84
Answer: D

Topic: Real wage
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking
44) Suppose Mack’s wage was $7.00 an hour in 2001 and was $12.00 per hour in 2012. The CPI was 94 in 2001 and 201 in 2012. The 2001 wage in terms of 2012 dollars is
Answer: A
Topic: Real wage
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

45) Your wage this year is $15 per hour and the CPI is 178. Next year you get a raise to $17 and the CPI rises to 185. What has happened?
   A) Your real wage has increased but by a smaller percentage than your nominal wage.
   B) Your nominal wage has increased but your real wage has declined.
   C) Your real wage rate has increased by a larger percentage than your nominal wage.
   D) Your real and nominal wages have each increased by the same percentage.
   E) Your nominal wage has increased but your real wage has not changed.
Answer: A
Topic: Real wage
Skill: Level 4: Applying models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

46) If your real income falls during a period of inflation, then your nominal income might have
   A) increased more rapidly than the price level.
   B) increased at the same rate as the price level.
   C) increased more slowly than the price level.
   D) decreased more slowly than the price level.
   E) More information is needed to determine if your nominal income increased more slowly, more rapidly, or at the same rate as the price level.
Answer: C
Topic: Nominal and real variables
Skill: Level 4: Applying models
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking

47) If you get an 8 percent increase in your nominal income, your real income
   A) definitely increases.
   B) increases only if the inflation rate is more than 8 percent.
   C) increases only if the inflation rate is equal to 8 percent.
   D) increases only if the inflation rate is less than 8 percent.
   E) increases if the inflation rate is more than or equal to 8 percent.
Answer: D
Topic: Nominal and real variables
Skill: Level 4: Applying models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking
48) If we look at the nominal versus real wage rates paid to Presidents over time, we find that
A) George Washington was paid a higher real wage rate than Bill Clinton.
B) George W. Bush is the highest paid according to real wage rates.
C) the real wage rate has steadily increased to $400,000 per year.
D) the nominal wage has increased and decreased at different times because of inflation.
E) George W. Bush’s nominal wage is about equal to the average nominal wage paid all presidents.
Answer: A

Topic: Eye on the past, real wage rates of U.S. Presidents
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Written and oral communication

49) The percentage return on a loan expressed in terms of goods and services is the
A) nominal wage rate.
B) real interest rate.
C) real wage rate.
D) nominal interest rate.
E) CPI interest rate.
Answer: B

Topic: Real interest rate
Skill: Level 1: Definition
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking

50) The real interest rate equals the
A) nominal interest rate – inflation rate.
B) nominal interest rate + inflation rate.
C) (nominal interest rate + inflation rate).
D) inflation rate – nominal interest rate.
E) (nominal interest rate + inflation rate) × 100.
Answer: A

Topic: Real interest rate
Skill: Level 1: Definition
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking
51) To convert the nominal interest rate to the real interest rate, we
   A) divide the nominal interest rate by the inflation rate.
   B) multiply the nominal interest rate by the inflation rate.
   C) subtract the inflation rate from the nominal interest rate.
   D) add the inflation rate to the nominal interest rate.
   E) subtract the nominal interest rate from the inflation rate and then multiply by 100.

   Answer: C
   Topic: Real interest rate
   Skill: Level 1: Definition
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Reflective thinking

52) The real interest rate equals the
   A) nominal interest rate multiplied by 100.
   B) nominal interest rate divided by 100.
   C) nominal interest rate minus the inflation rate.
   D) inflation rate minus the nominal interest rate.
   E) nominal interest rate divided by the inflation rate and then multiplied by 100.

   Answer: C
   Topic: Real interest rate
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Reflective thinking

53) If the inflation rate is greater than the nominal interest rate, then the
   A) real interest rate will be negative.
   B) real interest rate will be positive.
   C) inflation rate will increase.
   D) inflation rate will decrease.
   E) nominal interest rate will be negative.

   Answer: A
   Topic: Real interest rate
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Reflective thinking
54) If the nominal interest rate is greater than the real interest rate,
   A) it is an indication of economic growth.
   B) inflation must be occurring.
   C) lenders must lose because they can only make loans using the real interest rate.
   D) the real interest rate must be negative.
   E) None of the above answers is correct because it is not possible for the nominal interest rate to exceed the real interest rate.

Answer: B

Topic: Real interest rate
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking

55) The real interest rate is negative if the inflation rate
   A) exceeds the nominal interest rate.
   B) exceeds the real interest rate.
   C) is equal to the nominal interest rate.
   D) is less than the nominal interest rate.
   E) equals zero.

Answer: A

Topic: Real interest rate
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking

56) Which of the following is true?
   A) The real interest rate is always positive.
   B) The nominal interest rate is usually negative.
   C) The real interest rate can be negative.
   D) The real interest rate can never be zero.
   E) The nominal interest rate is usually less than the real interest rate.

Answer: C

Topic: Real interest rate
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking
57) If the CPI is 170 at the beginning of the year and 181 at the end, and a bank is paying a nominal interest rate of 6 percent, we see that
   A) the real interest rate is negative.
   B) the interest nominal rate is negative.
   C) the real interest rate is positive and is less than 1 percent.
   D) the real interest rate is positive and is larger than 1 percent.
   E) the real interest rate is equal to zero.

Answer: C

Topic: Real interest rate
Skill: Level 4: Applying models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

58) If the bank returns $1,060 on the $1,000 deposited for a year during which inflation was 4 percent, the real interest rate is
   A) 6 percent.
   B) 10 percent.
   C) -2 percent.
   D) 2 percent.
   E) 16 percent.

Answer: D

Topic: Real interest rate
Skill: Level 4: Applying models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

59) Citicorp charges an 11 percent interest rate on all new car loans. If the inflation rate is 6 percent, Citicorp receives a real interest rate of
   A) 11 percent.
   B) 6 percent.
   C) 1.83 percent.
   D) 5 percent.
   E) 0.54 percent.

Answer: D

Topic: Real interest rate
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking
60) Chloe has a $15,000 personal loan at a nominal interest rate of 8 percent. If the inflation rate is 3 percent, what is the real interest rate paid on the loan?
   A) 8 percent
   B) 5 percent
   C) 11 percent
   D) 3 percent
   E) 2.67 percent

   Answer: B
   Topic: Real interest rate
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Analytical thinking

61) Caroline has saved $100,000 for her retirement. She earned 4 percent interest on that money during the year 2013. If the inflation rate was 1 percent in 2013, what was Caroline’s real interest rate?
   A) $4,000  B) 4 percent  C) 3 percent  D) 1 percent  E) 5 percent

   Answer: C
   Topic: Real interest rate
   Skill: Level 3: Using models
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Analytical thinking

62) If the real interest rate is 5 percent when the inflation rate is 4 percent, the nominal interest rate is
   A) 1 percent.
   B) 9 percent.
   C) 20 percent.
   D) .80 percent.
   E) 1.25 percent.

   Answer: B
   Topic: Real interest rate
   Skill: Level 3: Using models
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Analytical thinking
63) If the real interest rate is 7 percent when the nominal interest is 12 rate is percent, the inflation rate is
   A) −5 percent.
   B) 5 percent.
   C) 19 percent.
   D) 1.7 percent.
   E) 7 percent.
   Answer: B
   Topic: Real interest rate
   Skill: Level 3: Using models
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Analytical thinking

64) If you have a mortgage on your house at 6 percent and the inflation rate when the mortgage was acquired was 3 percent but has since increased and is now 8 percent per year; the current real interest rate is
   A) 14 percent per year.
   B) 6 percent per year.
   C) 0 percent per year.
   D) −2 percent per year.
   E) 8 percent per year.
   Answer: D
   Topic: Real interest rate
   Skill: Level 3: Using models
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Analytical thinking

<table>
<thead>
<tr>
<th>Year</th>
<th>CPI</th>
<th>Nominal Wage Rate (dollars)</th>
<th>Nominal Interest Rate (percent)</th>
</tr>
</thead>
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<tr>
<td>2010</td>
<td>100</td>
<td>15.00</td>
<td>3</td>
</tr>
<tr>
<td>2011</td>
<td>95</td>
<td>15.00</td>
<td>4</td>
</tr>
<tr>
<td>2012</td>
<td>103</td>
<td>17.00</td>
<td>9</td>
</tr>
</tbody>
</table>

65) The table above has information about the CPI, nominal wage rate, and nominal interest rate for the country of Syldavia for the years 2010 to 2012. The reference base year is 2010. The inflation rate in Syldavia from 2010 to 2011 was
   A) −5.0 percent.
   B) 5.0 percent.
   C) 9.5 percent.
   D) 3.0 percent.
   E) −9.5 percent.
   Answer: A
   Topic: Inflation rate
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Analytical thinking
66) The table above has information about the CPI, nominal wage rate, and nominal interest rate for the country of Syldavia for the years 2010 to 2012. The reference base year is 2011. The inflation rate in Syldavia from 2011 to 2012 was
   A) 8.0 percent.
   B) 8.4 percent.
   C) 3.0 percent.
   D) 4.0 percent.
   E) 10.3 percent.
Answer: B
Topic: Inflation rate
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSBE: Analytical thinking

67) The table above has information about the CPI, nominal wage rate, and nominal interest rate for the country of Syldavia for the years 2010 to 2012. The reference base year is 2010. The real wage rate in Syldavia during 2011 was
Answer: C
Topic: Real wage rate
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSBE: Analytical thinking

68) The table above has information about the CPI, nominal wage rate, and nominal interest rate for the country of Syldavia for the years 2010 to 2012. The reference base year is 2010. The real interest rate in Syldavia during 2012 was
   A) 2.8 percent.
   B) 5.2 percent.
   C) 9.0 percent.
   D) 0.6 percent.
   E) 8.4 percent.
Answer: D
Topic: Real interest rate
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSBE: Analytical thinking
69) The CPI was 225 in 2008 and 232.2 in 2009. The nominal interest rate during this period was 1.4 percent. What was the real interest rate during this period?
   A) 3.2 percent
   B) 1.8 percent
   C) 4.6 percent
   D) -3.2 percent
   E) -1.8 percent

Answer: E

Topic: Real interest rate
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: New
AACSB: Analytical thinking

70) If we look at real and nominal interest rates in the United States since 1971, we see that
   A) the nominal interest rate has always been less than the real interest rate because of inflation.
   B) the real interest rate has almost always been less than the nominal interest rate because of inflation.
   C) at times the nominal interest rate has been greater than the real interest rate and at times has been less than it.
   D) the difference between the nominal and real interest rates has widened during the 1990s because of inflation.
   E) both the nominal and real interest rates were negative in the highly inflationary 1970s.

Answer: B

Topic: Nominal and real interest rates
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Written and oral communication

71) Looking at real and nominal interest rates in the United States since 1971, we see that the
   A) nominal interest rate has at times been negative.
   B) real interest rate has been greater than 10 percent for most years.
   C) real interest rate has at times been negative.
   D) real interest rate was above 5 percent during the low inflation of the 1970s.
   E) real interest is generally greater than the nominal interest rate.

Answer: C

Topic: Nominal and real interest rates
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Written and oral communication
72) In 2011, apples cost $1.49 a pound. Suppose the CPI was 120 in 2011 and 140 in 2012. If there is no change in the real price of an apple in 2012, what is the price of a pound of apples in 2012?

A) $2.74  B) $1.69  C) $1.66  D) $1.74  E) $1.28

Answer: D

Topic: Money values at different dates
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

73) In 1970 the CPI was 39, and in 2000 it was 172. A local phone call cost $0.10 in 1970. What is the price of this phone call in 2000 dollars?

A) $1.42  B) $0.39  C) $1.72  D) $0.44  E) $0.23

Answer: D

Topic: Money values at different dates
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

74) Nominal GDP is $12.1 trillion and real GDP is $11.0 trillion. The GDP price index is

A) 90.1  B) 121.  C) 1.10  D) 91.0  E) 110.

Answer: E

Topic: GDP price index
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

75) If real GDP is greater than nominal GDP then the GDP price index

A) is greater than 100.
B) is less than 100.
C) is equal to 100.
D) is either equal to or greater than 100.
E) None of the above answers is correct because we need to choose a new base year.

Answer: B

Topic: GDP price index
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

76) Nominal GDP was $12.1 trillion and real GDP is $11 trillion. The GDP price index is ______.

A) 90.1  B) 121.0  C) 1.10  D) 91.0  E) 110.0

Answer: E

Topic: GDP price index
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking
77) The nominal wage rate is the
   A) minimum hourly wage that a company can legally pay a worker.
   B) average hourly wage rate measured in the dollars of a given reference base year.
   C) minimum hourly wage rate measured in the dollars of a given reference base year.
   D) average hourly wage rate measured in current dollars.
   E) wage rate after inflation has been adjusted out of it.

Answer: D
Topic: Nominal wage
Skill: Level 1: Definition
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

78) The average starting salary for a history major is $29,500. If the CPI was 147.5, the real salary is
   A) $200.00 an hour.
   B) $20,000.
   C) $35,000.
   D) $43,513.
   E) $14,750.

Answer: B
Topic: Real wage
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

79) Since 1981, the
   A) real wage rate increased steadily.
   B) nominal wage rate increased and the real wage rate did not change by very much.
   C) real wage rate increased more than the nominal wage rate.
   D) nominal wage rate increased at an uneven pace whereas the increase in the real wage rate was steady and constant.
   E) nominal wage rate and real wage rate both decreased.

Answer: B
Topic: Nominal and real wage rates
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking
80) The real interest rate is equal to the
   A) nominal interest rate plus the inflation rate.
   B) nominal interest rate minus the inflation rate.
   C) nominal interest rate times the inflation rate.
   D) nominal interest rate divided by the inflation rate.
   E) inflation rate minus the nominal interest rate.

   Answer: B
   Topic: Real interest rate
   Skill: Level 1: Definition
   Section: Checkpoint 7.3
   Status: Old
   AACSBS: Reflective thinking

81) You borrow at a nominal interest rate of 10 percent. If the inflation rate is 4 percent, then the real interest rate is
   A) the $10 in interest you have to pay.
   B) 16 percent.
   C) 2.5 percent.
   D) 6 percent.
   E) 14 percent.

   Answer: D
   Topic: Real interest rate
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.3
   Status: Old
   AACSBS: Analytical thinking

82) In the United States for the last 40 years, the nominal interest rate
   A) and the real interest rate both decreased in almost every year.
   B) and the real interest rate were both constant in almost every year.
   C) was constant in most years and the real interest rate fluctuated.
   D) exceeded the real interest rate in virtually all the years.
   E) exceeded the real interest rate in about one half of the years and the real interest rate was greater than the nominal interest rate in the other half of the years.

   Answer: D
   Topic: Nominal and real interest rates
   Skill: Level 2: Using definitions
   Section: Checkpoint 7.3
   Status: Old
   AACSBS: Written and oral communication
1) The trends displayed in the table can best be explained by
   A) the nominal wage rate has increased at a rate about equal to the inflation rate.
   B) the real wage rate has increased at a rate about equal to the inflation rate.
   C) service industries have increased as a proportion of the economy and they tend to have higher nominal wage rates.
   D) the inflation rate has been rising over the time period.
   E) None of the above can explain the trends in the figure.

Answer: A

Topic: Real wage rate
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking
7.5 Integrative Questions

1) In the 1970s, a period of a high rate of inflation, a news magazine article listed people who were losing from inflation because their real purchasing power was falling. Those who lost the most were university professors. Which of the following explains this?

A) The marginal benefit of their work was falling.
B) Their wage rates did not increase as much as the CPI.
C) Their wage rates increased more rapidly than the CPI.
D) The professors suffered from the CPI bias.
E) The professors’ market basket was different than the market basket used to calculate the CPI.

Answer: B

Topic: Integrative
Skill: Level 4: Applying models
Section: Integrative
Status: Old
AACSB: Reflective thinking

2) The GDP price index

A) can be interpreted as 100 multiplied by real GDP divided by nominal GDP.
B) is the difference between nominal GDP and real GDP.
C) measures the average price level.
D) can be interpreted as real GDP minus nominal GDP and the resulting difference then multiplied by 100.
E) is equal to between real GDP minus nominal GDP.

Answer: C

Topic: Integrative
Skill: Level 2: Using definitions
Section: Integrative
Status: Old
AACSB: Reflective thinking

3) The GDP price index equals

i. nominal GDP divided by real GDP multiplied by 100.
ii. a measure of the price level.
iii. an average of current prices expressed as a percentage of base–year prices.

A) i only
B) ii and iii
C) iii only
D) i and ii
E) i, ii, and iii

Answer: E

Topic: Integrative
Skill: Level 2: Using definitions
Section: Integrative
Status: Old
AACSB: Reflective thinking
7.6 Essay: The Consumer Price Index

1) What are the three stages of constructing the CPI?

Answer: The first stage is to select the CPI market basket. The market basket is determined by surveying the spending habits of consumers by conducting a Consumer Expenditure Survey. The second stage is to check the prices of about 80,000 goods and services in 30 metropolitan areas. This checking is done on a monthly basis. The third stage is to calculate the CPI itself. To calculate the CPI, a period of time is selected as the base reference period and the cost of the CPI market basket using the prices from that period is computed. Then the CPI in any other month equals 100 times the quotient of the cost of the market basket using current-period prices divided by the cost of the market basket in the reference base period.

2) “The market basket used to calculate the CPI is revised monthly to more accurately depict consumers’ choices. The price data for the CPI are collected every month.” Are the previous sentences true or false?

Answer: The first sentence is false and the second is true. The point of the CPI is to determine how the prices of a fixed basket of goods and services change over time, so the CPI basket is revised only infrequently. However, the prices for the goods and services in the market basket are collected monthly so that the CPI can be computed monthly.

3) If you have the cost of the CPI market basket at current prices and the cost of the CPI market basket at base period prices, how do you calculate the CPI?

Answer: \[ CPI = \frac{(\text{Cost of CPI basket at current prices})}{(\text{Cost of CPI basket at base period prices})} \times 100. \]
4) What is inflation and how is it measured using the Consumer Price Index?

Answer: The inflation rate is the percentage change in the price level from one year to the next. In other words, it is the growth rate of the price level. The CPI is a measure of the price level and hence can be used to calculate the inflation rate. The inflation rate is equal to:

\[
\text{Inflation rate} = \frac{\text{CPI in current year} - \text{CPI in previous year}}{\text{CPI in previous year}} \times 100.
\]

Topic: Inflation
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

5) Assume that after you graduate, you move to a simple economy in which only three goods are produced and consumed: fish, fruit, and meat. Suppose that on January 1, fish sold for $2.50 per pound, meat was $3.00 per pound, and fruit was $1.50 per pound. At the end of the year, you discover that the catch was low and that fish prices had increased to $5.00 per pound, but fruit prices stayed at $1.50 per pound, and meat prices had actually fallen to $2.00. Can you say what happened to the overall CPI, in terms of whether it increased, decreased, or stayed the same? Do you have enough information to calculate the inflation rate? Note, this problem requires no calculation; just state and explain your answers.

Answer: You cannot say what happened to the CPI because you do not know the quantities in the market basket. You also do not have enough information to determine the inflation rate because you need the CPI at the beginning and the end of the year to compute the inflation rate.

Topic: Inflation
Skill: Level 2: Using definitions
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

6) If the base year CPI market basket costs $250 and next year the CPI market basket costs $275, what is next year’s CPI?

Answer: The CPI equals \(100 \times \left(\frac{275}{250}\right) = 110\).

Topic: Measuring the CPI
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking
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<tr>
<th></th>
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<tbody>
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<td>20</td>
<td>$3.00</td>
<td>22</td>
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<tr>
<td>Jugs of soda</td>
<td>20</td>
<td>$2.00</td>
<td>30</td>
<td>$1.50</td>
</tr>
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</table>

7) The table above gives the purchases of an average consumer in a small economy. (These consumers purchase only loaves of bread and jugs of soda.) Suppose 2010 is the reference base period.
   a. What quantities are in the CPI market basket?
   b. What is the cost of the CPI market basket using 2010 prices?
   c. What is the cost of the CPI market basket using 2011 prices?
   d. What is the CPI in 2011?

Answer: a. The quantities in the CPI market basket are the 2010 quantities because 2010 is the reference base period. So, the quantities are 20 loaves of bread and 20 jugs of soda.

b. The cost of the CPI basket using 2010 prices is (20 loaves × $3) + (20 jugs × $2) = $100.

c. The cost of the CPI basket using 2011 prices is (20 loaves × $4) + (20 jugs × $1.50) = $110. Note that the quantities used in this calculation are the quantities in the CPI market basket.

d. The CPI in 2011 equals 100 multiplied by the cost of the CPI market basket at 2011 prices divided by the cost of the CPI basket at 2010 (base period) prices. The CPI equals $100 × ($110)/($100) = 110.

Topic: Measuring the CPI
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking
8) The table above gives the purchases of a typical consumer in a country comprised of one large city. These consumers purchase only restaurant meals and parking. The year 2010 is the reference base period.

a. Find the total cost of the CPI market basket for 2010 and 2011.

b. What is the CPI in 2010 and in 2011?

c. What is the inflation rate between 2010 and 2011?

Answer: 

a. The total cost of the CPI market basket in 2010 equals 

\[(100 \text{ meals} \times \$10) + (50 \text{ parking} \times \$100) = \$6,000.\] 

The total cost of the CPI market basket in 2011 equals 

\[(100 \text{ meals} \times \$12) + (50 \text{ parking} \times \$97.50) = \$6,075.\] 

The quantities are the same in 2010 and 2011. If the quantities differed, the 2010 quantities would be used because 2010 is the base year.

b. The CPI in 2010 is 100 because 2010 is the base period. (Alternatively, the CPI in 2010 equals \((\$6,000)/\$6,000) \times 100 = 100.\) The CPI in 2011 equals \((\$6075)/\$6,000) \times 100 = 101.25.\)

c. The inflation rate between 2010 and 2011 equals \((101.25 - 100)/(100) \times 100 = 1.25\) percent.

9) The table above gives the CPI market basket for 2010 and 2011. Suppose that 2010 is the reference base period.

a. What is the cost of the CPI market basket in 2010?

b. What is the cost of the CPI market basket in 2011?

c. What is the CPI for 2010?

d. What is the CPI for 2011?

Answer: 

a. The cost of the CPI market basket in 2010 is \$1,520.00. \n
b. The cost of the CPI market basket in 2011 is \$1,712.50.

c. The CPI for 2010 is 100 because 2010 is the base period.

d. The CPI for 2011 equals \((\$1,712.50)/(\$1,520.00) \times 100 = 112.66.\)
10) If the CPI this year is 175.2 and next year the CPI is 176.1, what was the inflation rate over the year?

Answer: The inflation rate equals 100 \times (176.1 - 175.2)/(175.2) = 0.5 percent.

Topic: Inflation
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

11) Last year the CPI was 177.1 and this year the CPI was 180.9. What is the inflation rate between these two years?

Answer: The inflation rate equals 100 \times (180.9 - 177.1)/(177.1) = 2.1 percent.

Topic: Inflation
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking

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</tr>
<tr>
<td>2000</td>
<td>163.1</td>
</tr>
<tr>
<td>2001</td>
<td>166.7</td>
</tr>
<tr>
<td>2002</td>
<td>172.3</td>
</tr>
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</table>


Answer: Between 1997 to 1998, the inflation rate was 3.0 percent. Between 1998 to 1999, the inflation rate was 2.3 percent. Between 1999 to 2000, the inflation rate was 1.6 percent. Between 2000 to 2001, the inflation rate was 2.2 percent. And between 2001 to 2002, the inflation rate was 3.4 percent.

Topic: Inflation
Skill: Level 3: Using models
Section: Checkpoint 7.1
Status: Old
AACSB: Analytical thinking
7.7 Essay: The CPI and Other Price Level Measures

1) Is the CPI a biased measure of the inflation rate? Explain your answer.

Answer: There are four sources of bias in the CPI measure. The first bias is the new goods bias, which refers to the fact that new goods are continuously replacing old ones. Because the new goods are often both higher quality and higher priced, their introduction complicates measuring the CPI. The new goods bias biases the CPI upwards. Second, the CPI is not always adjusted for improvements in the quality of the products, which is the quality change bias. A price hike that reflects a quality increase often is mistakenly recorded as only a price hike, with no recognition given to the higher quality. Third, consumers substitute relatively lower priced goods for goods that increase in price, which is called commodity substitution. However, the CPI doesn’t take this substitution into account, thereby giving rise to the commodity substitution bias. Fourth, when faced with price hikes, consumers switch away from buying at full service stores to buying from discount stores because the prices in the discount stores are lower. Once again, the CPI does not take account of this outlet substitution and so the CPI suffers from the outlet substitution bias.

Topic: CPI bias, sources
Skill: Level 3: Using models
Section: Checkpoint 7.2
Status: Old
AACSB: Written and oral communication

2) "The new goods bias puts a downward bias into the CPI and its measure of the inflation rate."

Is the previous sentence correct or not? Explain your answer.

Answer: The sentence is false because the new goods bias puts an upward bias into the CPI and its measure of the inflation rate. The new goods bias occurs when new, higher quality and more expensive goods replace older, lower quality and less expensive goods. Part of the expense of the new goods is to pay for the higher quality of the new goods. But, if the price is not adjusted (downward) to take account of the higher quality, incorporating the new good into the CPI leads to an upward bias in the prices that go to make up the CPI and hence also an upward bias in the inflation rate.

Topic: CPI bias, commodity substitution bias
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: Old
AACSB: Written and oral communication
3) What is the commodity substitution bias? What effect does it have on the CPI?

Answer: The commodity substitution bias refers to the fact that people switch (substitute) away from goods and services that have risen in price and buy more goods and services that have not risen as much in price. Thus if the price of Coke rises 20 percent while Pepsi's price does not change, many people will substitute Pepsi for Coke. The commodity substitution bias in the CPI occurs because the CPI uses a fixed market basket of goods and services. So, if the market basket contains, say, 10 bottles of Coke and 8 bottles of Pepsi, the market basket will not change even though people change their buying patterns in favor of Pepsi and away from Coke. The change in people's buying patterns offsets, at least to a degree, the effect of higher prices. In the Coke/Pepsi case, by purchasing more Pepsi and less Coke, people have insulated themselves from part of the effect of the higher price of Coke. However the CPI does not take this change into account and so the CPI reflects the full effect of the higher price of Coke, thereby overstating the actual inflation that people experience.

Topic: CPI bias, commodity substitution bias
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: Old
AACSB: Written and oral communication

4) Explain the CPI bias and how it can distort private contracts and increase government outlays.

Answer: The CPI bias is the point that the CPI overstates the true inflation rate. The amount of the bias has been estimated at 1.1 percentage points per year. Thus when workers sign a contract that links their wages to the CPI in order to adjust the wages to offset inflation, the adjustment is too large. Wages rise by more than is necessary to keep pace with inflation. Thus a contract that might have been designed to keep workers "even" with inflation is distorted so that workers actually gain. Similarly, many government outlays, such as social security, are linked to the CPI. Thus the adjustment in these expenditures exceeds the amount necessary for inflation, and hence the amount of the government's outlays increases by more than is appropriate for inflation.

Topic: CPI bias, distortions
Skill: Level 3: Using models
Section: Checkpoint 7.2
Status: Old
AACSB: Written and oral communication

5) "The bias in the CPI distorts private contracts because a future payment that is linked to the CPI will be raised above the true increase in the price level." Is the previous sentence true or false?

Answer: The sentence is correct. The fact that the payments increase by more than the true increase in the price level means that one party to the contract benefits more, the higher the inflation rate.

Topic: CPI bias, distortion of private contracts
Skill: Level 3: Using models
Section: Checkpoint 7.2
Status: Old
AACSB: Written and oral communication
6) What, if any, is the impact of the CPI bias on government spending and taxes?

Answer: About one third of government outlays, such as Social Security, are linked to the CPI so that these sources of government spending increase when the CPI increases. Because the CPI overstates the actual inflation rate, government spending increases by more than is warranted by inflation. Hence the CPI bias increases the amount of government outlays. Additionally, taxes revenue is linked to the CPI because the CPI is used to adjust the income levels at which higher tax rates apply. Because the CPI overstates the actual inflation rate, the income levels are adjusted so they are higher than is appropriate. As a result, the government’s tax revenue is lower than otherwise.

Topic: CPI bias, government outlays
Skill: Level 2: Using definitions
Section: Checkpoint 7.2
Status: Old
AACS: Written and oral communication

7.8 Essay: Nominal and Real Values

1) Explain the difference between a nominal value and a real value.

Answer: A nominal value is the actual price that is paid or the actual wage received. If today you pay $1 for a can of Pepsi, this amount is a nominal value. A real value is adjusted for changes in the price level. To compare prices or wages across years, the nominal values need to be converted to real values. In other words, you need to compare values in the same dollars. This conversion is necessary because a dollar today is not worth the same as a dollar 20 years ago.

Topic: Nominal and real values
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACS: Written and oral communication

2) When the nominal price of a good increases over time, must its real price also increase?

Answer: No, even though the nominal price of a good increases, its real price might decrease. For instance, the nominal price of motorcycles has increased between 1970 and 2010, but their real price has decreased because the CPI increased even more rapidly.

Topic: Nominal and real values
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACS: Written and oral communication
3) What is the difference between nominal variables and real variables? Discuss the calculations undertaken to determine the real wage rate and the real interest rate. Explain why the real wage rate and real interest rate are real variables.

Answer: Nominal variables are measured using current dollars; real variables are measured using dollars of a given base year. More generally, nominal variables are in terms of current dollars whereas real variables are in terms of the quantity of goods and services that can be purchased. The real wage rate equals the nominal wage rate divided by the CPI. The real interest rate equals the nominal interest rate minus the inflation rate. The real wage rate is a real variable because it provides the purchasing power of an hour’s labor. The real interest rate is a real variable because it provides the purchasing power gained as interest on a loan.

Topic: Nominal and real values
Skill: Level 5: Critical thinking
Section: Checkpoint 7.3
Status: Old
AACSB: Written and oral communication

4) In 1995, the CPI was 152.5 and the price of an economics textbook was $70.00 and a music CD was $16.00. If the CPI was 172.3 in 2011, what were the prices of the economics textbook and the music CD in 2011 dollars?

Answer: To adjust the two prices, the ratio of the CPI in 2011 to the CPI in 1995 is needed. This ratio is (172.3)/(152.5) = 1.13. Then multiply the 1995 prices by this ratio to convert the prices to 2011 dollars. This yields a 2011 dollar price for the textbook of ($70.00 × 1.13) = $79.10 and a 2011 dollar price for the CD of ($16.00 × 1.13) = $18.08.

Topic: Money values at different dates
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

5) In 1979, the price of gasoline was $1.389 per gallon and the CPI was 72.6. In 2003, the price of gasoline was $1.589 per gallon and the CPI was 182.9. Find the real price of gasoline in 1979 and 2003 in terms of base period dollars.

Answer: To adjust the price in 1979, the ratio of the CPI in the base period to the CPI in 1979 is needed. The base period CPI is 100, so this ratio is (100)/(72.6) = 1.38. Then multiply the 1979 price by this ratio to convert the price to base period dollars, which yields a base period price for the gallon of gasoline of ($1.389 per gallon × 1.38) = $1.92 per gallon. To adjust the price in 2003, a similar procedure is followed. The ratio of the CPI in the base period to the CPI in 2003 is (100)/(182.9) = 0.55. Then multiply the 2003 price by this ratio to covert the price to base period dollars, which yields a base period price for the gallon of gasoline of ($1.589 per gallon × 0.55) = $0.87 per gallon.

Topic: Money values at different dates
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking
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<tr>
<td>2010</td>
<td>106.0</td>
</tr>
<tr>
<td>2011</td>
<td>111.0</td>
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</table>

6) Scott worked in a large foreign country. He retired in 2008 and his pension income is fixed at $1,500 per month. The table above gives the CPI in this country. What is the real monthly value of his pension in the years between 2008 and 2011?

Answer: To calculate the real value of the pension, divide the $1,500 pension by the CPI and then multiply by 100. This calculation gives the real values as: 2008, $1,500.00; 2009, $1,463.41; 2010, $1,415.09; 2011: $1,351.52.

7) For each of the following values of nominal GDP and real GDP, calculate the GDP price index.
   a. Nominal GDP = $600; real GDP = $800.
   b. Nominal GDP = $900; real GDP = $900.
   c. Nominal GDP = $1,200; real GDP = $1,000.

Answer: a. The GDP price index equals ($600 ÷ $800) × 100, which is 75.
   b. The GDP price index equals ($900 ÷ $900) × 100, which is 100.
   c. The GDP price index equals ($1,200 ÷ $1,000) × 100, which is 120.

8) If nominal GDP is $230 for a period and real GDP is $200 for the same period, what is the GDP price index for this period?

Answer: The GDP price index equals 115, or (100) × ($230 ÷ $200).

Topic: Real GDP and nominal GDP
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking
9) The table above has real and nominal GDP for two years for a foreign country.
   a. What does the GDP price index equal in 2010? What does the value of the GDP price index tell you about 2010?
   b. What does the GDP price index equal in 2011?

   Answer: a. The GDP price index equals \((100) \times (\text{nominal GDP} \div \text{real GDP})\). In 2010, the GDP price index equals \((100) \times (\$3,300\text{ trillion} \div \$3,300\text{ trillion}) = 100\). Because the GDP price index equals 100, we can determine that 2010 is a base year.
   b. In 2011, the GDP price index equals \((100) \times (\$4,200\text{ trillion} \div \$3,600\text{ trillion}) = 116.67\).

   Topic: Real GDP and nominal GDP
   Skill: Level 3: Using models
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Analytical thinking

10) Explain how the nominal wage rate is converted into the real wage rate. Explain why this process of conversion changes the nominal wage rate into the real wage rate.

   Answer: The real wage rate equals the nominal wage rate divided by the CPI. The nominal wage rate equals the dollars that are paid for an hour's labor. The CPI is a measure of the prices of the goods and services that the typical consumer purchases. Hence dividing the number of dollars for an hour's labor by the prices for the goods and services purchased gives, as its result, the number of goods and services that can be purchased by the hour's labor.

   Topic: Nominal and real wage rates
   Skill: Level 3: Using models
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Written and oral communication

11) Define the nominal wage rate and the real wage rate. Can the nominal wage rate increase faster than the real wage rate?

   Answer: The nominal wage rate is the wage rate measured in current dollars and the real wage rate is the wage rate measured in constant dollars. More generally, the nominal wage rate is the number of dollars received for an hour's work and the real wage rate is the number of goods and services that can be purchased with an hour's work. The nominal wage rate increases faster than the real wage rate when prices are increasing, that is, when inflation occurs.

   Topic: Nominal and real wage rates
   Skill: Level 3: Using models
   Section: Checkpoint 7.3
   Status: Old
   AACSB: Written and oral communication
12) Suppose the base reference period is 1982–1984. If your nominal wage rate is $8.00 per hour when the CPI is 180, what is your real wage rate in 1982–1984 dollars?

Answer: The real wage rate equals 100 times the nominal wage rate divided by the CPI. Hence the real wage rate equals 100 \times ($8.00)/(180) = $4.44.

Topic: Real wage rate
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

13) Define the nominal interest rate and the real interest rate. Discuss the relationship between the nominal interest rate and the real interest rate.

Answer: The nominal interest rate is the percentage return on a loan expressed in dollars. The real interest rate is the percentage return on a loan expressed in purchasing power. In other words, the nominal interest rate is the number of dollars received in interest for a loan and the real interest rate is the goods and services the interest can buy. The real interest rate equals the nominal interest rate minus the inflation rate.

Topic: Nominal and real interest rates
Skill: Level 1: Definition
Section: Checkpoint 7.3
Status: Old
AACSB: Written and oral communication

14) During periods when the inflation rate is positive, how does the real interest rate compare to the nominal interest rate?

Answer: The real interest rate equals the nominal interest rate minus the inflation rate or, by rearranging, the nominal interest rate equals the real interest rate plus the inflation rate. This latter specification shows that when the inflation rate is positive, the nominal interest rate is greater than the real interest rate.

Topic: Nominal and real interest rates
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Written and oral communication

15) "The real interest rate is found by dividing the nominal interest rate by the CPI." Is this statement true or false?

Answer: The statement is false. The real interest rate equals the nominal interest rate \textit{minus} the inflation rate, not divided by it.

Topic: Nominal and real interest rates
Skill: Level 1: Definition
Section: Checkpoint 7.3
Status: Old
AACSB: Reflective thinking
16) Explain how the real interest rate could be negative and how this situation would benefit the borrower.

Answer: When people borrow money, they pay a nominal interest rate to the lender. Inflation decreases the real buying power of the payments made to repay the loan. If the inflation rate is greater than the nominal interest rate, then the real interest rate is negative. In this case, the lender actually loses by lending money to the borrower because the quantity of goods and services the lender can buy with the proceeds of the loan has actually decreased.

Topic: Real interest rate
Skill: Level 2: Using definitions
Section: Checkpoint 7.3
Status: Old
AACSB: Written and oral communication

17) In the late 1970s, the inflation rate was over 10 percent per year. Many home mortgage lending institutions had mortgages outstanding that had been made in the 1960s at nominal interest rates of around 5 percent per year. Many of these lending institutions failed. What can explain the high failure rate of lenders in the late 1970s?

Answer: The real interest rate the lenders were earning was 5 percent per year minus 10 percent per year inflation, making the real interest rate significantly negative, −5 percent per year. With the negative real interest rate, these financial institutions were incurring losses and eventually many were forced into bankruptcy.

Topic: Real interest rate
Skill: Level 4: Applying models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking

18) If the nominal interest rate equals 10 percent and the inflation rate equals 6 percent, what does the real interest rate equal?

Answer: The real interest rate equals the nominal interest rate minus the inflation rate, or in this case, 10 percent minus 6 percent, which equals 4 percent.

Topic: Real interest rate
Skill: Level 3: Using models
Section: Checkpoint 7.3
Status: Old
AACSB: Analytical thinking