

**TEST BANK**

# ECONOMICS

Principles, Applications, and Tools

SEVENTH EDITION

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**Macroeconomics: Principles, Applications, & Tools, 7e (O'Sullivan) - Testbank 2**  
**Chapter 2 The Key Principles of Economics**

2.1 The Principle of Opportunity Cost

1) The opportunity cost of something is:

- A) the cost of the labor used to produce it.
- B) what you sacrifice to get it.
- C) the price charged for it.
- D) the search cost required to find it.

Answer: B

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Definition

2) The principle of opportunity cost:

- A) is more relevant for firms than for individuals.
- B) only refers to monetary payments.
- C) is only relevant in economics.
- D) is applicable to all decision-making.

Answer: D

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

3) The principle that states that the cost of something is equal to what is sacrificed to get it is known as the:

- A) marginal principle.
- B) principle of opportunity cost.
- C) principle of diminishing returns.
- D) reality principle.

Answer: B

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Definition

4) The saying that "There's no such thing as a free lunch" refers to the:

- A) marginal principle.
- B) spillover principle.
- C) principle of opportunity cost.
- D) reality principle.

Answer: C

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

5) Suppose that your tuition to attend college is \$10,000 per year and you spend \$4,000 per year on room and board. If you were working full time instead of attending college, you could earn \$20,000 per year. What is your opportunity cost of attending college for one year?

- A) \$14,000
- B) \$24,000
- C) \$30,000
- D) \$34,000

Answer: C

Diff: 1

Topic: The Cost of College

Skill: Analytical

AACSB: Analytic Skills

6) Suppose that your tuition to attend college is \$5,000 per year and you spend \$5,000 per year on room and board. If you were working full time, you could earn \$22,000 per year. What is your opportunity cost of attending college?

- A) \$13,000
- B) \$27,000
- C) \$30,000
- D) \$35,000

Answer: B

Diff: 1

Topic: The Cost of College

Skill: Analytical

AACSB: Analytic Skills

7) Mark quit his job as a salesman where he made \$43,000 per year to start his own t-shirt making business. His business expenses are \$6,000 per year on rent, \$12,000 per year on supplies, and \$4,000 per year on part-time help. As for his personal expenses, his apartment costs him \$4,800 per year and his personal bills are an extra \$1,200 per year. What is Mark's opportunity cost of running the business?

- A) \$65,000
- B) \$57,000
- C) \$71,000
- D) \$43,000

Answer: A

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Analytical

AACSB: Analytic Skills

8) Mark quit his job as a salesman where he made \$43,000 per year to start his own t-shirt making business. His business expenses are \$6,000 per year on rent, \$12,000 per year on supplies, and \$4,000 per year on part-time help. As for his personal expenses, his apartment costs him \$4,800 per year and his personal bills are an extra \$1,200 per year. Which of the following is not part of the opportunity cost of running his business?

- A) his apartment costs
- B) his personal bills
- C) his part-time labor costs
- D) his apartment costs and his personal bills

Answer: D

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

9) Suppose a ticket to a concert costs \$39, and parking costs \$5. Further, in order to watch the concert, you must miss 2 hours of work where your hourly wage is \$15 per hour. The total opportunity cost of watching a concert is:

- A) \$74.
- B) \$44.
- C) \$39.
- D) \$30.

Answer: A

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Analytical

AACSB: Analytic Skills

10) An unemployed individual decides to spend the day fishing. The opportunity cost of fishing is equal to:

- A) the cost of bait and any other monetary expenses.
- B) zero, because the person doesn't have a job.
- C) the value of the individual's wages while he was working.
- D) the cost of bait, any other monetary expenses, and the value of the best alternative use of the individual's time.

Answer: D

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Analytical

AACSB: Analytic Skills

11) The opportunity cost of going to college:

- A) is zero if your parents pay your tuition.
- B) is equal to the cost of tuition, room and board, and other expenses.
- C) includes wages you lose by going to school instead of working.
- D) is the same for all students at a particular school who pay full tuition.

Answer: C

Diff: 1

Topic: The Cost of College

Skill: Conceptual

AACSB: Reflective Thinking

12) Pat claims to save a great deal of money on groceries by traveling to various supermarkets to make her purchases at their advertised sale prices. She might visit as many as five different stores in one day in order to complete her weekly shopping. Her savings are not as great as she may think they are if she does not consider the:

- A) cost of the gasoline in driving from one store to another.
- B) mileage she is putting on her car driving from one store to another.
- C) value of the time she is spending doing the shopping as opposed to other things.
- D) all of the above

Answer: D

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Analytical

AACSB: Reflective Thinking

13) Five years ago Tammy always took a big envelope full of coupons to the grocery store. Now she has a child in pre-school, she rarely brings coupons. Which of the following is not a possible explanation of this change in her behavior?

- A) Fewer coupons appear in the newspapers than five years ago.
- B) The opportunity cost of clipping coupons has risen above their monetary value.
- C) Grocery prices have decreased.
- D) The opportunity cost of grocery shopping has decreased.

Answer: D

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Analytical

AACSB: Analytic Skills

14) Nancy and Melissa both have broken light fixtures in their living rooms. Nancy opts to hire an electrician, while Melissa spends two hours replacing the fixture herself. Which of the following is a possible explanation of this behavior?

- A) Nancy dislikes electrical work more than Melissa.
- B) Melissa is better at doing electrical work than Nancy.
- C) The opportunity cost of Nancy's time is higher than her cost to hire an electrician.
- D) All of the above are possible explanations of this behavior.

Answer: D

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Analytical

AACSB: Reflective Thinking

15) Suppose that you own a house. What is the opportunity cost of living in the house?

- A) There is no opportunity cost because you own the house.
- B) There is no opportunity cost unless you could set up a business in the house.
- C) The opportunity cost is the rent you could have received from a tenant if you didn't live there.
- D) The opportunity cost is the cost of your monthly mortgage payment plus bills.

Answer: C

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

16) Steven lives in a big city where there is a shortage of parking. He has a parking spot in his driveway where he parks his car. Which of the following statement is most correct?

- A) Steven has a lower opportunity cost of owning a car than his neighbor, who must rent a parking spot.
- B) The opportunity cost of using the parking spot is zero, because Steven owns the house.
- C) The opportunity cost of using the parking spot is the price he could charge someone else for using the spot.
- D) The opportunity cost depends on how much Steven's mortgage payment is.

Answer: C

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Analytical

AACSB: Reflective Thinking

17) You have an hour between your economics and math classes. What is the opportunity cost of that time if you use it to do math homework?

- A) It depends on what you would do if you had no math homework.
- B) It depends on how much you like math.
- C) Zero, because an hour isn't long enough to go to a paying job.
- D) Zero, because it doesn't cost any money to do your math homework.

Answer: A

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

18) You rent a copy of a new action/adventure movie. The rental is for seven days and you watch the movie on the first day. You tell a friend about the film and your friend asks to come over and watch the movie with you before it is due back. What is your opportunity cost of watching the movie a second time?

- A) Zero, because it won't cost you any money to keep the movie for another day.
- B) One half the rental cost, because you have already watched the movie one time.
- C) The answer depends on how much you liked the movie in the first place.
- D) The answer depends on what else you could do besides watching the movie.

Answer: D

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

19) Jessica, aged three, decides to dress up like Sleeping Beauty for Halloween. What is her opportunity cost of this decision?

- A) the cost of the costume
- B) the fact that she can't dress up like Barbie, her second choice
- C) zero, because three-year-olds do not have opportunity costs
- D) impossible to say, because Jessica does not understand what an opportunity cost is

Answer: B

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

20) Spending money on a fixed budget is an example of:

- A) the principle of opportunity cost.
- B) how to survive with unlimited financial resources.
- C) a bad thing to do because you run out of money.
- D) living on the edge.

Answer: A

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

21) The saying that "There is no such thing as a free lunch" refers to:

- A) the principle of reality in a modern world.
- B) the price of fast food in today's economy.
- C) the principle of diminishing returns.
- D) the principle of opportunity cost.

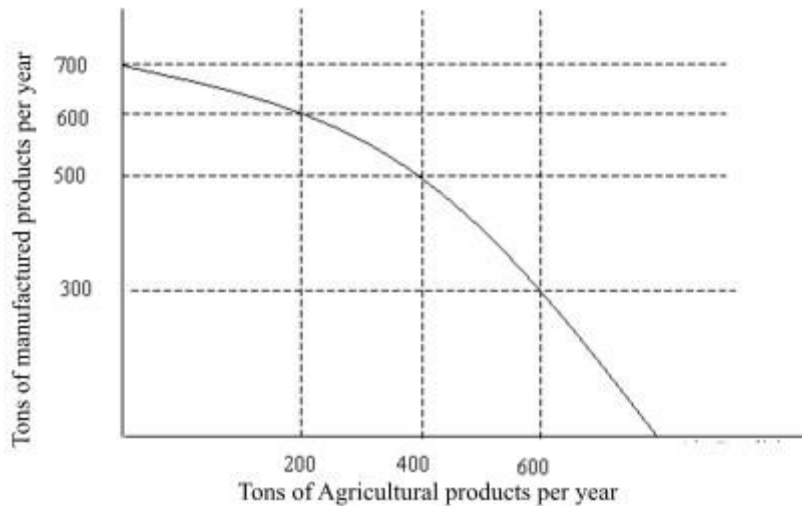
Answer: D

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking



**Figure 2.1**

22) Referring to Figure 2.1, if you increase the production of farm goods, what other area is affected?

- A) the price of produce
- B) the production of factory goods
- C) how much people can purchase
- D) the wages earned by farm workers

Answer: B

Diff: 1

Topic: Opportunity Cost and the Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills



23) The production possibilities curve in Figure 2.1 illustrates the notion of:

- A) increased factory goods production.
- B) increased farm produce production.
- C) diminishing resources.
- D) opportunity cost.

Answer: D

Diff: 1

Topic: Opportunity Cost and the Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

24) On the production possibilities curve in Figure 2.1 as agricultural production increases by 200 tons per year from 200 tons to 400 tons and then to 600 tons, the opportunity cost in terms of tons of manufacturing goods:

- A) rises.
- B) falls.
- C) is constant.
- D) becomes negative.

Answer: A

Diff: 3

Topic: Opportunity Cost and the Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

25) On the production possibilities curve in Figure 2.1 the opportunity costs of increasing agricultural production from 200 tons to 400 tons is:

- A) 600 tons of manufacturing products.
- B) 500 tons of manufacturing products.
- C) 200 tons of manufacturing products.
- D) 100 tons of manufacturing products.

Answer: D

Diff: 2

Topic: Opportunity Cost and the Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

26) On the production possibilities curve in Figure 2.1 the opportunity costs of increasing agricultural production from 400 tons to 600 tons is:

- A) 600 tons of manufacturing.
- B) 500 tons of manufacturing.
- C) 200 tons of manufacturing.
- D) 100 tons of manufacturing.

Answer: C

Diff: 2

Topic: Opportunity Cost and the Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

27) On the production possibilities curve in Figure 2.1 the gain from decreasing manufacturing production from 700 tons to 500 tons is:

- A) 700 tons of agriculture.
- B) 500 tons of agriculture.
- C) 200 tons of agriculture.
- D) 100 tons of agriculture.

Answer: C

Diff: 2

Topic: Opportunity Cost and the Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

28) On the production possibilities curve in Figure 2.1 the gain from decreasing manufacturing production from 500 tons to 300 tons is:

- A) 700 tons of agriculture.
- B) 500 tons of agriculture.
- C) 200 tons of agriculture.
- D) 100 tons of agriculture.

Answer: C

Diff: 2

Topic: Opportunity Cost and the Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

29) If an economy is fully utilizing its resources, it can produce more of one product only if it:

- A) doubles manufacturing of the product.
- B) produces less of another product.
- C) adds more people to the labor force.
- D) reduces the prices of the most expensive products.

Answer: B

Diff: 1

Topic: Opportunity Cost & Production Possibilities Curve

Skill: Analytical

AACSB: Reflective Thinking

30) If you remove resources from factory production, the quantity of factory goods will:

- A) increase.
- B) decrease.
- C) remain the same but their price will decrease.
- D) be diverted to other production.

Answer: B

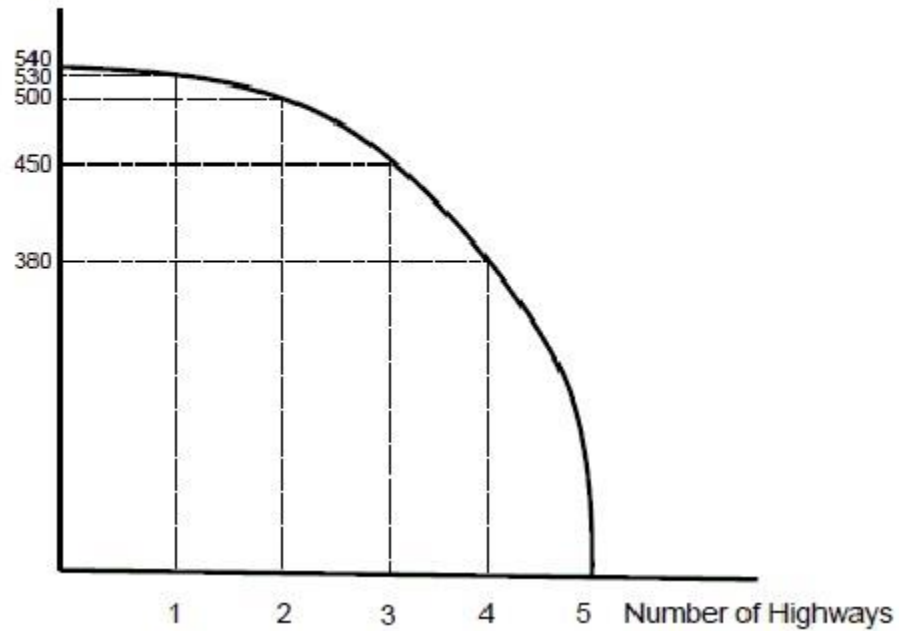
Diff: 1

Topic: Opportunity Cost & Production Possibilities Curve

Skill: Analytical

AACSB: Reflective Thinking

Thousands of  
people provided  
with medical care



**Figure 2.2**

31) Figure 2.2 presents a production possibilities curve for a country that can either produce highways or provide people with medical care in a given year. The opportunity cost of the second new highway built in a year is:

- A) 30,000 people provided with medical care.
- B) 40,000 people provided with medical care.
- C) 50,000 people provided with medical care.
- D) 500,000 people provided with medical care.

Answer: A

Diff: 1

Topic: Opportunity Cost & Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

32) Figure 2.2 presents a production possibilities curve for a country that can either produce highways or provide people with medical care in a given year. The opportunity cost of the third new highway built in a year is:

- A) 10,000 people provided with medical care.
- B) 50,000 people provided with medical care.
- C) 90,000 people provided with medical care.
- D) 450,000 people provided with medical care.

Answer: B

Diff: 1

Topic: Opportunity Cost & Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

33) Figure 2.2 presents a production possibilities curve for a country that can either produce highways or provide people with medical care in a given year. The opportunity cost of the fourth new highway built in a year is:

- A) less than the opportunity cost of the third new highway.
- B) the same as the opportunity cost of the third new highway.
- C) greater than the opportunity cost of the third new highway.
- D) the sum of the opportunity costs of the first three highways built.

Answer: C

Diff: 1

Topic: Opportunity Cost & Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

34) Figure 2.2 presents a production possibilities curve for a country that can either produce highways or provide people with medical care in a given year. The opportunity cost of the fourth new highway built in a year is:

- A) less than the opportunity cost of the third new highway.
- B) the same as the opportunity cost of the third new highway.
- C) greater than the opportunity cost of the third new highway.
- D) the sum of the opportunity costs of the first three highways built.

Answer: C

Diff: 1

Topic: Opportunity Cost & Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

35) Figure 2.2 presents a production possibilities curve for a country that can either produce highways or provide people with medical care in a given year. The figure shows that the production possibilities curve is:

- A) bowed inward.
- B) bowed outward.
- C) a straight line.
- D) bowed inward and then outward.

Answer: B

Diff: 1

Topic: Opportunity Cost & Production Possibilities Curve, graph

Skill: Definition

AACSB: Analytic Skills

36) Figure 2.2 presents a production possibilities curve for a country that can either produce highways or provide people with medical care in a given year. The reason why the production possibilities curve is shaped as it is (bowed outward) is because inputs for healthcare and highways are:

- A) used in precisely the same ratios.
- B) substitutable, but not perfectly substitutable.
- C) not substitutable at all.
- D) perfectly substitutable.

Answer: B

Diff: 3

Topic: Opportunity Cost & Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

37) Figure 2.2 presents a production possibilities curve for a country that can either produce highways or provide people with medical care in a given year. The figure shows that as more highways are built, the opportunity cost of building each additional highway is:

- A) decreasing.
- B) increasing.
- C) constant.
- D) decreasing and then increasing.

Answer: B

Diff: 2

Topic: Opportunity Cost & Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

38) Figure 2.2 presents a production possibilities curve for a country that can either produce highways or provide people with medical care in a given year. The opportunity cost of the fourth new highway built in a year is:

- A) 50,000 people provided with medical care.
- B) 70,000 people provided with medical care.
- C) 30,000 people provided with medical care.
- D) 90,000 people provided with medical care.

Answer: B

Diff: 2

Topic: Opportunity Cost & Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

Houses	Yards
0	21
1	20
2	18
3	15
4	11
5	6
6	0

**Table 2.1**

39) A group of people has formed a house cleaning and yard maintenance business. The number of houses or yards that they can clean or maintain in any given day is depicted in Table 2.1. The opportunity cost of cleaning the first house in a day is:

- A) 0 yards maintained.
- B) 1 yard maintained.
- C) 2 yards maintained.
- D) 20 yards maintained.

Answer: B

Diff: 1

Topic: Opportunity Cost & Production Possibilities Curve

Skill: Analytical

AACSB: Analytic Skills

40) A group of people has formed a house cleaning and yard maintenance business. The number of houses or yards that they can clean or maintain in any given day is depicted in Table 2.1. The opportunity cost of cleaning the second house in a day is:

- A) 1 yard maintained.
- B) 2 yards maintained.
- C) 3 yards maintained.
- D) 18 yards maintained.

Answer: B

Diff: 1

Topic: Opportunity Cost & Production Possibilities Curve

Skill: Analytical

AACSB: Analytic Skills

41) A group of people has formed a house cleaning and yard maintenance business. The number of houses or yards that they can clean or maintain in any given day is depicted in Table 2.1. The opportunity cost of cleaning the third house in a day is:

- A) 1 yard maintained.
- B) 2 yards maintained.
- C) 3 yards maintained.
- D) 15 yards maintained.

Answer: C

Diff: 1

Topic: Opportunity Cost & Production Possibilities Curve

Skill: Analytical

AACSB: Analytic Skills

42) A group of people has formed a house cleaning and yard maintenance business. The number of houses or yards that they can clean or maintain in any given day is depicted in Table 2.1. As the group cleans more houses, the opportunity cost of cleaning houses:

- A) falls.
- B) rises.
- C) stays the same.
- D) is the sum of the opportunity costs of cleaning all the houses prior to that one.

Answer: B

Diff: 1

Topic: Opportunity Cost & Production Possibilities Curve

Skill: Analytical

AACSB: Analytic Skills

43) A group of people has formed a house cleaning and yard maintenance business. The number of houses or yards that they can clean or maintain in any given day is depicted in Table 2.1. As the group cleans more houses, the opportunity cost of doing yard work:

- A) falls.
- B) rises.
- C) stays the same.
- D) becomes equal to the opportunity cost of cleaning houses.

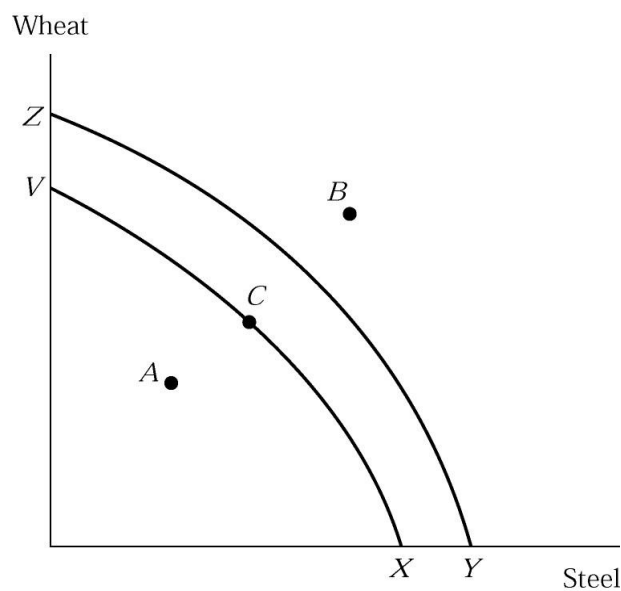
Answer: B

Diff: 2

Topic: Opportunity Cost & Production Possibilities Curve

Skill: Analytical

AACSB: Reflective Thinking



**Figure 2.3**

44) In Figure 2.3, the move from production possibility curve  $XV$  to production possibility curve  $YZ$  could be caused by:

- A) decreased unemployment.
- B) more land, labor or capital.
- C) a decline in technology.
- D) all of the above.

Answer: B

Diff: 2

Topic: Opportunity Cost & Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills



45) In Figure 2.3, point B:

- A) implies unemployment of some resources.
- B) is the optimum.
- C) cannot be produced.
- D) all of the above.

Answer: C

Diff: 2

Topic: Opportunity Cost & Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

46) In Figure 2.3, point A:

- A) implies unemployment of some resources.
- B) is the optimum.
- C) cannot be produced.
- D) all of the above.

Answer: A

Diff: 2

Topic: Opportunity Cost & Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

47) In Figure 2.3, an efficient production point on production possibility curve *XV* is

- A) point A.
- B) point B.
- C) point C.
- D) none of the above.

Answer: C

Diff: 2

Topic: Opportunity Cost & Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

48) In Figure 2.3, an efficient production point on production possibility curve *YZ* is

- A) point A.
- B) point B.
- C) point C.
- D) none of the above.

Answer: D

Diff: 2

Topic: Opportunity Cost & Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

49) In Figure 2.3, the move from production possibility curve YZ to production possibility curve XV, could be caused by:

- A) increased unemployment.
- B) more land, labor or capital.
- C) a decline in technology.
- D) all of the above.

Answer: C

Diff: 2

Topic: Opportunity Cost & Production Possibilities Curve, graph

Skill: Analytical

AACSB: Analytic Skills

**Recall Application 1, "Don't Forget the Costs of Time and Invested Funds," to answer the following questions.**

50) According to the application, if this year Betty spends \$100,000 of her own money on materials, the interest rate is 5%, has living expenses of \$20,000 and could have made \$50,000 in her former line of employment, then Betty's opportunity cost of operating the business this year is:

- A) \$50,000.
- B) \$55,000.
- C) \$150,000.
- D) \$155,000.

Answer: B

Diff: 2

Topic: Application 1, Don't Forget the Costs of Time and Invested Funds

Skill: Analytical

AACSB: Analytic Skills

51) According to the application, if the interest rate rises, then the opportunity costs of running a business:

- A) rises.
- B) falls.
- C) is unchanged.
- D) cannot be determined with the information given.

Answer: A

Diff: 2

Topic: Application 1, Don't Forget the Costs of Time and Invested Funds

Skill: Conceptual

AACSB: Reflective Thinking

52) According to the application, if Betty's living expenses rises, then the opportunity costs of running a business:

- A) rises.
- B) falls.
- C) is unchanged.
- D) cannot be determined with the information given.

Answer: C

Diff: 2

Topic: Application 1, Don't Forget the Costs of Time and Invested Funds

Skill: Conceptual

AACSB: Reflective Thinking

53) A principle is a self-evident truth that most people readily understand and accept.

Answer: TRUE

Diff: 1

Topic: The Key Principles of Economics

Skill: Definition

54) Opportunity cost is the difference between the benefit and cost of some action.

Answer: FALSE

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Definition

55) An increase in the benefit from undertaking an activity will result in an increase in the opportunity cost of that activity.

Answer: FALSE

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

56) An increase in the wages received by lawyers in general will result in an increase in the opportunity cost of law school.

Answer: FALSE

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

57) In order to go to college, James incurs an opportunity cost even though all he gave up was a full time job as a clerk at Wally World.

Answer: TRUE

Diff: 1

Topic: The Cost of College

Skill: Conceptual

AACSB: Reflective Thinking

58) The opportunity cost of going to a particular college is not the same for everyone.

Answer: TRUE

Diff: 2

Topic: The Cost of College

Skill: Analytical

AACSB: Reflective Thinking

59) The opportunity cost of getting a master's degree in engineering equals the tuition plus the cost of books.

Answer: FALSE

Diff: 1

Topic: The Cost of College

Skill: Conceptual

AACSB: Reflective Thinking

60) The opportunity cost of something is what you sacrifice to get it.

Answer: TRUE

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Definition

61) Tradeoffs involve an exchange of one thing for another because resources are limited and can be used in different ways.

Answer: TRUE

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

62) The notion of opportunity cost allows the measurement of tradeoffs.

Answer: TRUE

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

63) What is the opportunity cost of your college degree?

Answer: A quick answer would be to say that the cost is the tuition, room and board, and books expenditures that are borne during the college years. But such a statement would be incorrect. First, it understates one aspect of costs: one is giving up income while a student. But it also overstates the costs in another dimension: people would eat and sleep somewhere regardless of their attendance in college. So one should not consider room and board to be part of the cost of college attendance.

Diff: 1

Topic: The Cost of College

Skill: Conceptual

AACSB: Reflective Thinking

64) What do economists mean when they say that there is "no such thing as a free lunch"?

Answer: Everything has a cost, even when you do not pay money for it. Suppose that somebody bought you lunch. The opportunity cost of that lunch is the lost opportunity to spend your time otherwise.

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

65) Suppose that you lend \$1,000 to a friend who pays you back \$1,100 the next year. Suppose that prices that year rose by 8% and the real rate of return in the stock market was 4%. Your friend says that he or she was being more than fair by giving you more than the rate of inflation as a return. What do you think?

Answer: The opportunity cost of that money was not just the 8% inflation, but also the real rate of return that would have been enjoyed had the money been put in the stock market. For you to have been indifferent between loaning your money versus keeping it, your friend should have reimbursed you by \$1,120, or a 12% return. This is another example of considering all the costs, both the loss in purchasing power of the money due to inflation and the implicit cost of the return that could have been earned if the money was invested in the stock market.

Diff: 3

Topic: The Principle of Opportunity Cost

Skill: Analytical

AACSB: Analytic Skills

66) What is the opportunity cost of investing \$10,000 of your own money in a business you wish to start?

Answer: The opportunity cost of your \$10,000 is the money you lose because you cannot invest the money elsewhere.

Diff: 2

Topic: The Principle of Opportunity Cost

Skill: Analytical

AACSB: Reflective Thinking

67) By making acquisitions, resources are used that could have been used to \_\_\_\_\_.

Answer: acquire something else

Diff: 1

Topic: The Principle of Opportunity Cost

Skill: Conceptual

AACSB: Reflective Thinking

## 2.2 The Marginal Principle

1) The additional cost resulting from a small increase in some activity is called the:

- A) opportunity cost.
- B) marginal benefit.
- C) marginal cost.
- D) diminishing returns of the activity.

Answer: C

Diff: 1

Topic: The Marginal Principle

Skill: Definition

2) When economists use the term "marginal," they usually refer to

- A) small, incremental change.
- B) large changes.
- C) no changes.
- D) average change.

Answer: A

Diff: 1

Topic: The Marginal Principle

Skill: Definition

3) The marginal principle states that "we should increase the level of an activity as long as:

- A) its marginal benefit exceeds its marginal cost."
- B) its marginal cost exceeds its marginal benefit."
- C) its total benefit exceeds its total cost."
- D) its total cost exceeds its total benefit."

Answer: A

Diff: 1

Topic: The Marginal Principle

Skill: Definition

4) If the government estimates that the marginal cost of building a bridge is \$100 million, while the marginal benefit is \$150 million, the marginal principle dictates that the government should:

- A) build the bridge.
- B) never build the bridge.
- C) wait until the marginal cost of building the bridge rises to above \$150 million before building the bridge.
- D) wait until the marginal benefit of building the bridge drops to below \$100 million before building the bridge.

Answer: A

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

5) The extra benefit resulting from a small increase in an activity is called the:

- A) opportunity cost.
- B) marginal benefit.
- C) marginal cost.
- D) diminishing returns of the activity.

Answer: B

Diff: 1

Topic: The Marginal Principle

Skill: Definition

6) The additional cost resulting from a small increase in some activity is called the:

- A) opportunity cost.
- B) marginal benefit.
- C) marginal cost.
- D) diminishing returns of the activity.

Answer: C

Diff: 1

Topic: The Marginal Principle

Skill: Definition

7) The principle that individuals and firms pick the activity level where the incremental benefit of that activity equals the incremental cost of that activity is known as the:

- A) marginal principle.
- B) principle of opportunity cost.
- C) principle of diminishing returns.
- D) spillover principle.

Answer: A

Diff: 1

Topic: The Marginal Principle

Skill: Definition

8) According to the marginal principle, an individual will do best by producing or consuming where:

- A) marginal benefit exceeds total benefits.
- B) marginal benefit is less than marginal cost.
- C) marginal benefit equals marginal cost.
- D) total benefit equals total cost.

Answer: C

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

9) According to the marginal principle, a rational individual should undertake an economic activity as long as the:

- A) marginal benefit exceeds marginal cost.
- B) marginal benefit is less than marginal cost.
- C) marginal benefit equals marginal cost.
- D) total benefit equals total cost.

Answer: A

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

10) According to the marginal principle, a rational individual should not undertake an economic activity if the:

- A) marginal benefit exceeds marginal cost.
- B) marginal benefit is less than marginal cost.
- C) marginal benefit equals marginal cost.
- D) total benefit equals total cost.

Answer: B

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

11) According to the marginal principle, a rational firm will introduce a movie sequel as long as:

- A) marginal benefit exceeds marginal cost.
- B) marginal benefit is less than marginal cost.
- C) marginal benefit equals marginal cost.
- D) total benefit equals total cost.

Answer: A

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

12) Suppose it costs a firm \$200 million to produce and promote a sequel. If the firm follows the marginal principle and decides not to produce the movie, which of the following must be true?

- A) The firm believes that the marginal benefit is less than \$200 billion.
- B) The firm believes that the marginal cost is larger than \$200 billion.
- C) The firm believes that the marginal benefit is larger than \$200 billion.
- D) The firm believes that the marginal cost is less than \$200 billion.

Answer: A

Diff: 1

Topic: The Marginal Principle

Skill: Analytical

AACSB: Reflective Thinking



13) If a consumer can buy four DVDs for \$44 and five DVDs for \$50, then the marginal cost of the fifth DVD is:

- A) \$10.
- B) \$50.
- C) \$11.
- D) \$6.

Answer: D

Diff: 1

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

14) If a consumer can buy four pizzas for \$24 and five pizzas for \$25, then the marginal cost of the fifth pizza is:

- A) \$25.
- B) \$5.
- C) \$6.
- D) \$1.

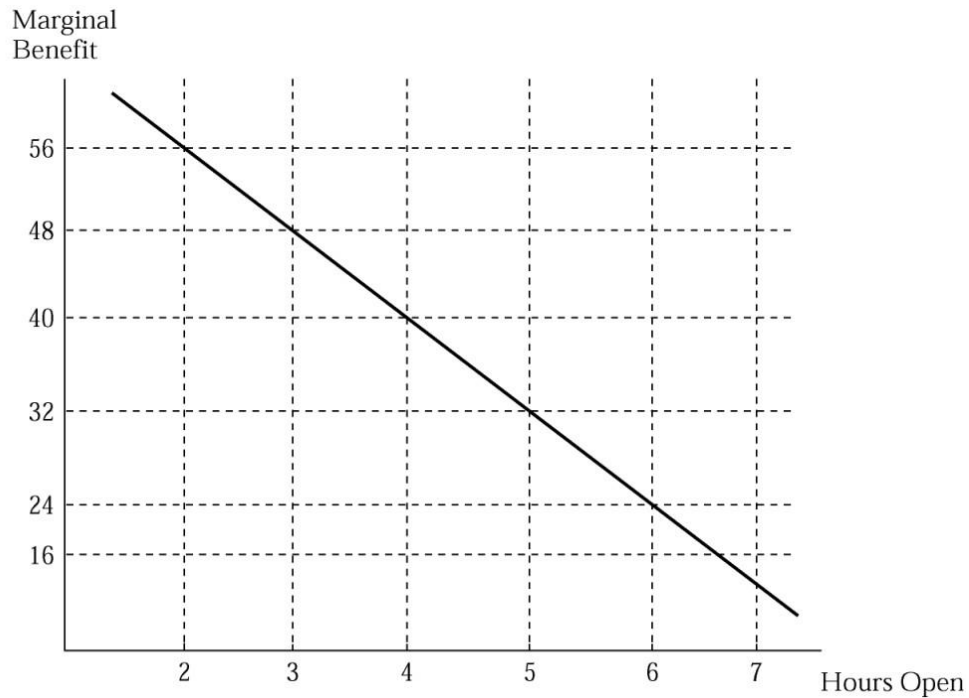
Answer: D

Diff: 1

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills



**Figure 2.4**

15) Joe runs a business and needs to decide how many hours to stay open. Figure 2.4 illustrates his marginal benefit of staying open for each additional hour. Suppose that Joe's marginal cost of staying open per hour is \$24. How many hours should Joe stay open?

- A) 3 hours
- B) 4 hours
- C) 5 hours
- D) 6 hours

Answer: D

Diff: 1

Topic: The Marginal Principle, graph

Skill: Analytical

AACSB: Analytic Skills

16) Joe runs a business and needs to decide how many hours to stay open. Figure 2.4 illustrates his marginal benefit of staying open for each additional hour. Suppose that Joe's marginal cost of staying open per hour is \$32. How many hours should Joe stay open?

- A) 4 hours
- B) 5 hours
- C) 6 hours
- D) 7 hours

Answer: B

Diff: 1

Topic: The Marginal Principle, graph

Skill: Analytical

AACSB: Analytic Skills

17) Joe runs a business and needs to decide how many hours to stay open. Figure 2.4 illustrates his marginal benefit of staying open for each additional hour. Suppose that Joe's marginal cost of staying open per hour is \$40. How many hours should Joe stay open?

- A) 3 hours
- B) 4 hours
- C) 5 hours
- D) 6 hours

Answer: B

Diff: 1

Topic: The Marginal Principle, graph

Skill: Analytical

AACSB: Analytic Skills

18) Joe runs a business and needs to decide how many hours to stay open. Figure 2.4 illustrates his marginal benefit of staying open for each additional hour. Suppose that we observe Joe staying open 5 hours per day. If he is following the marginal principle, what must his marginal cost be?

- A) \$16
- B) \$24
- C) \$32
- D) \$40

Answer: C

Diff: 1

Topic: The Marginal Principle, graph

Skill: Analytical

AACSB: Analytic Skills

19) Joe runs a business and needs to decide how many hours to stay open. Figure 2.4 illustrates his marginal benefit of staying open for each additional hour. Suppose that we observe Joe staying open 3 hours per day. If he is following the marginal principle, what must his marginal cost be?

- A) \$24
- B) \$32
- C) \$40
- D) \$48

Answer: D

Diff: 1

Topic: The Marginal Principle, graph

Skill: Analytical

AACSB: Analytic Skills

20) Joe runs a business and needs to decide how many hours to stay open. Figure 2.4 illustrates his marginal benefit of staying open for each additional hour. Suppose that we observe Joe staying open 4 hours per day. If he is following the marginal principle, what must his marginal cost be?

- A) \$16
- B) \$24
- C) \$32
- D) \$40

Answer: D

Diff: 1

Topic: The Marginal Principle, graph

Skill: Analytical

AACSB: Analytic Skills

21) Joe runs a business and needs to decide how many hours to stay open. Figure 2.4 illustrates his marginal benefit of staying open for each additional hour. Suppose that we observe Joe staying open 6 hours per day. If he is following the marginal principle, what must his marginal cost be?

- A) \$16
- B) \$24
- C) \$32
- D) \$48

Answer: B

Diff: 1

Topic: The Marginal Principle, graph

Skill: Analytical

AACSB: Analytic Skills

Hours of operation	Marginal cost (\$)
1	4
2	8
3	12
4	16
5	20
6	24
7	28

**Table 2.2**

22) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that Julianne's marginal benefit of staying open per hour is \$20. If she is following the marginal principle, how many hours should Julianne stay open?

- A) 4 hours
- B) 5 hours
- C) 6 hours
- D) 7 hours

Answer: B

Diff: 1

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

23) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that Julianne's marginal benefit of staying open per hour is \$12. If she is following the marginal principle, how many hours should Julianne stay open?

- A) 3 hours
- B) 4 hours
- C) 6 hours
- D) 7 hours

Answer: A

Diff: 1

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

24) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that Julianne's marginal benefit of staying open per hour is \$16. If she is following the marginal principle, how many hours should Julianne stay open?

- A) 3 hours
- B) 4 hours
- C) 5 hours
- D) 7 hours

Answer: B

Diff: 1

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

25) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that we observe Julianne staying open 5 hours per day. If she is following the marginal principle, what must her marginal benefit be?

- A) \$10
- B) \$16
- C) \$20
- D) \$24

Answer: C

Diff: 1

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

26) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that we observe Julianne staying open 3 hours per day. If she is following the marginal principle, what must her marginal benefit be?

- A) \$12
- B) \$16
- C) \$18
- D) \$24

Answer: A

Diff: 1

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

27) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that we observe Julianne staying open 2 hours per day. If she is following the marginal principle, what must her marginal benefit be?

- A) \$8
- B) \$12
- C) \$20
- D) \$22

Answer: A

Diff: 1

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

28) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that Julianne's marginal benefit of staying open per hour is \$24. If she is following the marginal principle, how many hours should Julianne stay open?

- A) 2 hours
- B) 4 hours
- C) 6 hours
- D) 7 hours

Answer: C

Diff: 2

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

29) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that Julianne's marginal benefit of staying open per hour is \$28. If she is following the marginal principle, how many hours should Julianne stay open?

- A) 1 hour
- B) 3 hours
- C) 6 hours
- D) 7 hours

Answer: D

Diff: 2

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

30) Julianne runs a business and needs to decide how many hours to stay open. Table 2.2 illustrates her marginal costs of staying open for each additional hour. Suppose that Julianne's marginal benefit of staying open per hour is \$3. If she is following the marginal principle, how many hours should Julianne stay open?

- A) 1 hour
- B) 3 hours
- C) 6 hours
- D) none of the above

Answer: D

Diff: 2

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

31) When referring to "marginal" changes, the economic focus is on:

- A) changes that affect only a few people or products.
- B) large changes on the low end.
- C) graduated changes on the high end.
- D) small or incremental changes.

Answer: D

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

32) The extra benefit resulting from a small increase in some activity is called the:

- A) marginal cost.
- B) marginal benefit.
- C) marginal value.
- D) marginal equilibrium.

Answer: B

Diff: 1

Topic: The Marginal Principle

Skill: Definition

33) When deciding whether to engage in an activity or how much to do, people should follow:

- A) the principle of microeconomics.
- B) the principle of macroeconomics.
- C) the marginal principle.
- D) the law of supply and demand.

Answer: C

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking



**Recall Application 2, "Why Not Walk Up an Escalator?," to answer the following questions:**

34) According to the application, an individual would walk up the stairs to listen to a music being played if:

- A) the marginal benefit exceeds the marginal cost of walking up the stairs.
- B) the marginal cost exceeds the marginal benefit of walking up the stairs.
- C) the marginal benefit of walking up the stairs exceeds zero.
- D) the total benefit of walking up the stairs exceeds zero.

Answer: A

Diff: 1

Topic: Application 2: Why Not Walk Up an Escalator?

Skill: Conceptual

AACSB: Reflective Thinking

35) According to the application, the marginal benefit of walking up the escalator:

- A) is the benefit of arriving sooner.
- B) is the benefit of hearing music played.
- C) is not using the escalator.
- D) is the benefit of getting more exercise.

Answer: A

Diff: 1

Topic: Application 2: Why Not Walk Up an Escalator?

Skill: Conceptual

AACSB: Reflective Thinking

36) According to the application, an individual would walk up the escalator instead of just standing still if:

- A) the marginal benefit exceeds the marginal cost of walking up the escalator.
- B) the marginal benefit is less than the marginal cost of walking up the escalator.
- C) the marginal benefit of walking up the escalator is greater than zero.
- D) the marginal benefit of standing still is greater than zero.

Answer: A

Diff: 1

Topic: Application 2: Why Not Walk Up an Escalator?

Skill: Conceptual

AACSB: Reflective Thinking

37) According to the application, most people stand still while using the escalator because:

- A) the marginal benefit exceeds the marginal cost of walking up the escalator.
- B) the marginal benefit is less than the marginal cost of walking up the escalator.
- C) the marginal benefit of standing still is zero.
- D) the marginal benefit of standing still is greater than zero.

Answer: B

Diff: 1

Topic: Application 2: Why Not Walk Up an Escalator?

Skill: Conceptual

AACSB: Reflective Thinking

38) When Jimmy produces one guitar his costs total \$250. When he produces two guitars his total costs are \$400. This means that Jimmy's marginal cost of producing the second guitar is \$200.

Answer: FALSE

Diff: 2

Topic: The Marginal Principle

Skill: Analytical

AACSB: Analytic Skills

39) Economists argue that individuals should continue to consume until total benefit equals total cost.

Answer: FALSE

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

40) If a company's total costs per day increase from \$500 to \$600 by adding another worker, but its additional benefits are \$150, it is sensible to add that additional worker.

Answer: TRUE

Diff: 2

Topic: The Marginal Principle

Skill: Analytical

AACSB: Reflective Thinking

41) When applying the marginal principle, you should pick the level at which the activity's marginal benefit equals its marginal cost.

Answer: TRUE

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

42) Basically, the marginal principle teaches us to evaluate the factors involved in taking an action to decide if the action it is worth the effort.

Answer: TRUE

Diff: 1

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

43) Increase the level of an activity if its marginal benefit exceeds its marginal cost; reduce the level of an activity if its marginal cost exceeds its marginal benefit. This is known as the \_\_\_\_\_.

Answer: marginal principle

Diff: 1

Topic: The Marginal Principle

Skill: Definition

44) Different people eat different amounts of food when they go to buffet restaurants, even though they all pay the same price. Explain how this relates to the marginal principle.

Answer: The marginal monetary cost of eating more is zero, so people will eat until they would not enjoy eating other bite. There is an implicit cost of eating more once you are full (extra weight gain and physical discomfort). Therefore, people will eat until marginal benefit equals marginal cost, and this will occur at different amounts of food for different people.

Diff: 2

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

45) Farmer Bill grows corn on his 27-acre farm. To increase production, he puts more and more fertilizer on the corn. What does the marginal principle say will happen?

Answer: Eventually the marginal benefit of adding fertilizer will decrease. In fact, eventually the fertilizer will begin to burn the plants, so the marginal benefit of fertilizer will become negative.

Diff: 1

Topic: The Marginal Principle

Skill: Analytical

AACSB: Reflective Thinking

46) Consider a firm that is trying to determine how many hours to remain open in a day. How would the firm make this decision?

Answer: The firm would continue to stay open as long as the incremental benefit of staying open (say, the increased revenues) each extra hour exceeds (or at least equals) the incremental costs (e.g., electricity, wages, etc.) incurred from staying open that hour.

Diff: 2

Topic: The Marginal Principle

Skill: Conceptual

AACSB: Reflective Thinking

47) The additional cost resulting from a one unit increase in the production of a good is known as the \_\_\_\_\_.

Answer: marginal cost

Diff: 1

Topic: The Marginal Principle

Skill: Definition

48) Marginal cost is the additional cost resulting from a *large* or *small* increase in some activity.

Answer: small

Diff: 1

Topic: The Marginal Principle

Skill: Definition

## 2.3 The Principle of Voluntary Exchange

1) When people interact in markets for their own self interest, it is described as the:

- A) principle of supply and demand.
- B) principle of voluntary exchange.
- C) laws of each state.
- D) principle of scarcity.

Answer: B

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Definition

2) When two people engage in voluntary trade,

- A) one will necessarily lose.
- B) both will necessarily lose.
- C) both will expect to be made better off.
- D) each will expect to lose.

Answer: C

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Conceptual

AACSB: Reflective Thinking

3) When you voluntarily accept a job and exchange your labor for money,

- A) you and your employer expect to be better off.
- B) you and your employer expect to be worse off.
- C) you expect to be better off while your employer expect to be worse off.
- D) you expect to be worse off while your employer expect to be better off.

Answer: A

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Conceptual

AACSB: Reflective Thinking

4) Firms expect to make money on repeat business because:

- A) they think they can put one over on their customers.
- B) all firms are monopolists.
- C) firms have more power than customers.
- D) the management of the firm expects both the firm and their customers to be made better off by their exchange.

Answer: D

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Conceptual

AACSB: Reflective Thinking

5) The economic reason why you voluntarily pay tuition to get into the university/college that you are in right now is because:

- A) you believe the value of education is higher than the tuition costs.
- B) the marginal benefit of education is positive.
- C) the marginal benefit of money is zero.
- D) you believe the value of education is lower than the tuition costs.

Answer: A

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Conceptual

AACSB: Reflective Thinking

6) The economic reason why some individuals choose keep their tuition money and not to go to school is:

- A) they believe the value of education is higher than the tuition costs.
- B) the marginal cost of education is zero.
- C) the marginal benefit of money is zero.
- D) they believe the value of education is lower than the tuition costs.

Answer: D

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Conceptual

AACSB: Reflective Thinking

**Recall Application 3, "Jasper Johns and House Painting," to answer the following questions:**

7) According to the application, if Jasper Johns earns \$5,000 per day painting art and \$1,500 per day painting houses, he should:

- A) only paint art.
- B) only paint houses.
- C) paint both houses and art.
- D) paint art on the side of his house.

Answer: A

Diff: 1

Topic: Application 3: Jasper Johns and House Painting

Skill: Conceptual

AACSB: Reflective Thinking

8) Suppose that a house painter can earn \$200 per day painting houses and painting Jasper Johns' house requires 25 days of labor. According to the application, if Jasper Johns earns \$5,000 per day painting art, then he must:

- A) paint his house if he can paint it in less than a day.
- B) switch occupations and paint houses only.
- C) never paint his house.
- D) paint his house if he can paint it in less than 25 days.

Answer: A

Diff: 1

Topic: Application 3: Jasper Johns and House Painting

Skill: Conceptual

AACSB: Reflective Thinking

9) Suppose that a house painter can earn \$200 per day painting houses while Jasper Johns earns \$5,000 per day painting art. According to the application, Jasper Johns should:

- A) paint his house if he can paint his house at least 25 times faster than a house painter.
- B) never hire a house painter.
- C) never paint his house.
- D) paint his house if he can paint it in less than 25 days.

Answer: A

Diff: 1

Topic: Application 3: Jasper Johns and House Painting

Skill: Conceptual

AACSB: Reflective Thinking

10) The principle of voluntary exchange is the concept that a voluntary exchange between two people makes both people better off.

Answer: TRUE

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Definition

11) When two parties engage in voluntary exchange, one must be made worse off.

Answer: FALSE

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Conceptual

AACSB: Reflective Thinking

12) Two parties engage in exchange when each one expects to be made better off by the exchange.

Answer: TRUE

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Conceptual

AACSB: Reflective Thinking

13) Firms that make their customers better off get more repeat business and make earn more profits.

Answer: TRUE

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Conceptual

AACSB: Reflective Thinking

14) People acting in their own self interest try to gain at the expense of others in exchange leads to someone necessarily losing in a voluntary exchange.

Answer: FALSE

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Conceptual

AACSB: Reflective Thinking

15) When you have a job and your employer compensates you for your time with money, resulting in both of you being better off, it is an example of a voluntary exchange.

Answer: TRUE

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Conceptual

AACSB: Reflective Thinking

16) A "market" is an arrangement that enables people to exchange goods and services.

Answer: TRUE

Diff: 1

Topic: Exchange and Markets

Skill: Definition

17) Being self-sufficient in the production of everything we need is efficient.

Answer: FALSE

Diff: 1

Topic: Exchange and Markets

Skill: Conceptual

AACSB: Reflective Thinking

18) The only way individuals can cope with scarcity is by being self-sufficient.

Answer: FALSE

Diff: 1

Topic: Exchange and Markets

Skill: Conceptual

AACSB: Reflective Thinking

19) If each of us could produce everything we needed for ourselves, we would be considered to be \_\_\_\_\_.

Answer: self-sufficient

Diff: 1

Topic: Exchange and Markets

Skill: Definition

20) When does voluntary exchange take place?

Answer: When both parties expect to be made better off by the exchange.

Diff: 1

Topic: The Principle of Voluntary Exchange

Skill: Conceptual

AACSB: Reflective Thinking

## 2.4 The Principle of Diminishing Returns

1) The principle of diminishing returns implies that when one input increases while the other inputs are held fixed, output: beyond some point will exhibit:

- A) increases at an increasing rate.
- B) increases at a decreasing rate.
- C) decreases at a decreasing rate.
- D) decreases at an increasing rate.

Answer: B

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Definition

2) The principle that "as one input increases while the other inputs are held fixed, output beyond some point will exhibit increases at a decreasing rate" is known as the:

- A) marginal principle.
- B) principle of opportunity cost.
- C) principle of diminishing returns.
- D) spillover principle.

Answer: C

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Definition

3) Diminishing returns occurs because:

- A) not enough people have jobs.
- B) one of the inputs to the production process is fixed.
- C) consumers do not buy enough of the products produced.
- D) people have not satisfied their self-interests.

Answer: B

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking



4) According to the principle of diminishing returns, if all factors of production but one are held constant and if that one factor is doubled, then eventually output will most likely:

- A) double too.
- B) less than double.
- C) more than double.
- D) none of the above

Answer: B

Diff: 2

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

5) A firm produces its product using both capital and labor. When it does not change its capital usage, but doubles its labor input, its output increases by less than 50%. Which of the following is the most likely explanation of this finding?

- A) the principle of opportunity cost
- B) the principle of diminishing returns
- C) the marginal principle
- D) the spillover principle

Answer: B

Diff: 2

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

6) According to the principle of diminishing returns, if the number of workers is increased beyond the point of diminishing returns, then the additional worker:

- A) increases total output by the same amount as previous workers.
- B) increases total output by more than the amount of previous workers.
- C) increases total output by less than the amount of previous workers.
- D) decreases total output.

Answer: C

Diff: 2

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

7) The principle of diminishing returns occurs:

- A) when there is only one input.
- B) when there are two or more inputs and at least one input is held fixed.
- C) when there are two or more inputs and all inputs are held fixed.
- D) when there are two or more inputs and all inputs are allowed to vary.

Answer: B

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

Units of Capital	Number of Workers	Output/Day
5	0	0
5	1	100
5	2	180
5	3	240
5	4	280
5	5	300

**Table 2.3**

8) The firm depicted in Table 2.3 is facing diminishing returns because:

- A) capital and labor are both fixed.
- B) capital and labor are both variable.
- C) capital is fixed.
- D) the number of workers can only be increased to 5.

Answer: C

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

9) Refer to Table 2.3. The marginal product of the 4th worker is:

- A) 100 units of output.
- B) 80 units of output.
- C) 60 units of output.
- D) 40 units of output.

Answer: D

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Analytical

AACSB: Analytic Skills

10) Refer to Table 2.3. The marginal product of the 3rd worker is:

- A) 100 units of output.
- B) 80 units of output.
- C) 60 units of output.
- D) 40 units of output.

Answer: C

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Analytical

AACSB: Analytic Skills

11) Refer to Table 2.3. The marginal product of the 1st worker is:

- A) 100 units of output.
- B) 80 units of output.
- C) 60 units of output.
- D) 40 units of output.

Answer: A

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Analytical

AACSB: Analytic Skills

12) Refer to Table 2.3. The marginal product of the 2nd worker is:

- A) 100 units of output.
- B) 80 units of output.
- C) 60 units of output.
- D) 40 units of output.

Answer: B

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Analytical

AACSB: Analytic Skills

13) Refer to Table 2.3. The principle of diminishing returns sets in with the addition of the \_\_\_\_\_ worker.

- A) 1st
- B) 2nd
- C) 3rd
- D) 4th

Answer: B

Diff: 2

Topic: The Principle of Diminishing Returns

Skill: Analytical

AACSB: Analytic Skills

Acres of Land	Tanks of Fertilizer	Truckloads of Fruit
10	0	45
10	1	63
10	2	83
10	3	88
10	4	89
10	5	89

**Table 2.4**

14) The firm depicted in Table 2.4 is likely to face diminishing returns because:

- A) the amount of fertilizer can only be increased to 5.
- B) land and fertilizer are both fixed.
- C) land and fertilizer are both variable.
- D) land is fixed but fertilizer is variable.

Answer: D

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

15) Refer to Table 2.4. The marginal product of the 3rd tank of fertilizer is:

- A) 29.33 truckloads of fruit.
- B) 1.67 truckloads of fruit.
- C) 20 truckloads of fruit.
- D) 5 truckloads of fruit.

Answer: D

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Analytical

AACSB: Analytic Skills

16) Refer to Table 2.4. The marginal product of the 2nd tank of fertilizer is:

- A) 41.5 truckloads of fruit.
- B) 10 truckloads of fruit.
- C) 20 truckloads of fruit.
- D) 5 truckloads of fruit.

Answer: C

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Analytical

AACSB: Analytic Skills

17) Refer to Table 2.4. The principle of diminishing returns sets in with the addition of the \_\_\_\_\_ tank of fertilizer.

- A) 2nd
- B) 3rd
- C) 4th
- D) 5th

Answer: B

Diff: 2

Topic: The Principle of Diminishing Returns

Skill: Analytical

AACSB: Analytic Skills

18) The principle of diminishing returns does not apply to labor when all inputs are allowed to vary because:

- A) a firm can build an additional production facility so each worker's share of the facility doesn't necessarily decrease.
- B) eventually the marginal product of labor will begin to increase again.
- C) a firm can fire inefficient workers.
- D) None of the above, diminishing returns always apply.

Answer: A

Diff: 2

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

**Recall Application 4, "Fertilizer and Crop Yields" to answer the following questions:**

19) According to the application, the corn production exhibited the principle of diminishing returns because:

- A) the size of the land and the amount of machinery were held constant.
- B) the type of soil was held constant.
- C) the type of fertilizer was held constant.
- D) the amount of nitrogen in each bag is decreasing.

Answer: A

Diff: 2

Topic: Application 4, Fertilizer and Crop Yields

Skill: Conceptual

AACSB: Reflective Thinking

20) As bags of nitrogen applied went from 0 to 1 to 2 to 3 to 4, crop yield went from 85 to 120 to 135 to 144 to 147 bushels per acre. The results show that as more bags of nitrogen was added, holding all other inputs constant, output:

- A) fell.
- B) rose but at a declining rate.
- C) rose but at an increasing rate.
- D) stayed the same.

Answer: B

Diff: 2

Topic: Application 4, Fertilizer and Crop Yields

Skill: Conceptual

AACSB: Reflective Thinking

21) Table 2.1 in the application showed that when the bags of nitrogen applied went from 0 to 1 to 2 to 3 to 4, crop yield went from 85 to 120 to 135 to 144 to 147 bushels per acre. The principles of diminishing return began to take effect on the \_\_\_\_\_ bag of fertilizer per acre.

- A) 1st
- B) 2nd
- C) 3rd
- D) 4th

Answer: A

Diff: 2

Topic: Application 4, Fertilizer and Crop Yields

Skill: Analytical

AACSB: Analytic Skills

22) As bags of nitrogen applied went from 0 to 1 to 2 to 3 to 4, crop yield went from 85 to 120 to 135 to 144 to 147 bushels per acre or production exhibited:

- A) increasing returns to fertilizer.
- B) constant returns to land.
- C) diminishing returns to fertilizer.
- D) decreasing returns to land.

Answer: C

Diff: 2

Topic: Application 4, Fertilizer and Crop Yields

Skill: Conceptual

AACSB: Analytic Skills

23) According to the principle of diminishing returns, an additional worker decreases total output.

Answer: FALSE

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

24) As more and more of a variable input is combined with some fixed inputs, additions to the total output decline.

Answer: TRUE

Diff: 2

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

25) The marginal output of labor is the amount of output that can be produced if one more unit of labor is added.

Answer: TRUE

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Conceptual

AACSB: Reflective Thinking

26) You are running a small yard maintenance business for the summer. What do you expect to happen to the number of yards you can maintain in a day as you add workers if you don't purchase more capital equipment (like mowers and leaf blowers)?

Answer: It is likely that as you add workers, you will get incrementally less output out of each additional worker. Holding constant your materials, such as trucks, lawnmowers, etc., you'll almost surely be able to maintain more yards per day. But as you hire more workers, there might be waits for the use of the tools, or for transportation to the next job.

Diff: 2

Topic: The Principle of Diminishing Returns

Skill: Analytical

AACSB: Analytic Skills

27) When a firm hired its tenth worker, its factory output increased by four units per month. Would you expect the firm's output to increase by eight more units per month if the firm hired two more workers?

Answer: No. The principle of diminishing marginal returns suggests that after some point of increasing returns, each incremental worker should have a progressively lower level of marginal productivity.

Diff: 2

Topic: The Principle of Diminishing Returns

Skill: Analytical

AACSB: Analytic Skills

28) Producing more output in an existing production facility by increasing the number of workers sharing the facility will bring into effect the principle of \_\_\_\_\_.

Answer: diminishing returns

Diff: 1

Topic: The Principle of Diminishing Returns

Skill: Definition

## 2.5 The Real-Nominal Principle

1) The real-nominal principle states that:

- A) people respond more to explicit, or real, costs than to implicit costs.
- B) people respond more to implicit costs than to explicit costs.
- C) what matters to people is the face value of money or income.
- D) what matters to people is the purchasing power of money or income.

Answer: D

Diff: 1

Topic: The Real-Nominal Principle

Skill: Definition

2) The principle that what matters to people is the real value or purchasing power of money is the:

- A) marginal principle.
- B) principle of diminishing returns.
- C) spillover principle.
- D) real-nominal principle.

Answer: D

Diff: 1

Topic: The Real-Nominal Principle

Skill: Definition

3) The face value of money or income is called its \_\_\_\_\_ value.

- A) real
- B) marginal
- C) nominal
- D) external

Answer: C

Diff: 1

Topic: The Real-Nominal Principle

Skill: Definition

4) The value of money or income in terms of the quantity of goods the money can buy is called its:

- A) real value.
- B) marginal value.
- C) nominal value.
- D) implicit value.

Answer: A

Diff: 1

Topic: The Real-Nominal Principle

Skill: Definition



- 5) The real value of money:  
A) is another word for the face value.  
B) reflects the purchasing power of the sum of money.  
C) matters less to people than its nominal value.  
D) Both B and C are correct.

Answer: B

Diff: 2

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

- 6) If real salaries increase but nominal salaries do not, this means that:  
A) the purchasing power of money has decreased.  
B) prices have not changed.  
C) prices have risen.  
D) prices have fallen.

Answer: D

Diff: 2

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

- 7) If real salaries decrease but nominal salaries do not, this means that:  
A) the purchasing power of money has increased.  
B) prices have not changed.  
C) prices have risen.  
D) prices have fallen.

Answer: C

Diff: 2

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

- 8) A major league baseball player signs a contract that pays \$50 million over five years. The \$50 million is its \_\_\_\_\_ value.

- A) real  
B) implicit  
C) external  
D) nominal

Answer: D

Diff: 1

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

9) Suppose your bank pays you 6% interest per year on your savings account, so that \$100 grows to \$106 over a one-year period. If prices increase by 3% per year over that time, approximately how much real value do you gain by keeping \$100 in the bank for a year?

- A) \$0
- B) \$1
- C) \$3
- D) \$4

Answer: C

Diff: 2

Topic: The Real-Nominal Principle

Skill: Analytical

AACSB: Analytic Skills

10) Suppose your bank pays you 6% interest per year on your savings account. If prices increase by 3% per year over that time, approximately how much nominal value do you gain by keeping \$100 in the bank for a year?

- A) \$6
- B) \$0
- C) \$3
- D) \$106

Answer: A

Diff: 2

Topic: The Real-Nominal Principle

Skill: Analytical

AACSB: Analytic Skills

11) Suppose your bank pays you 5% interest per year on your savings account. If prices increase by 3% per year over that time, approximately how much real value do you gain by keeping \$100 in the bank for a year?

- A) \$0
- B) \$2
- C) \$3
- D) \$6

Answer: B

Diff: 2

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

12) Suppose your bank pays you 5% interest per year on your savings account while prices increase by 3% per year over that time. Approximately how much nominal value do you gain by keeping \$100 in the bank for a year?

- A) \$5
- B) \$2.50
- C) \$0
- D) \$2.00

Answer: A

Diff: 2

Topic: The Real-Nominal Principle

Skill: Analytical

AACSB: Analytic Skills

13) Suppose prices increase by 4% per year. What nominal percentage return on your savings account would you require to get a 1% real return?

- A) 0%
- B) 2%
- C) 5%
- D) 7%

Answer: C

Diff: 2

Topic: The Real-Nominal Principle

Skill: Analytical

AACSB: Analytic Skills

14) Suppose prices increase by 3% per year. What nominal percentage return on your savings account would you require to get a 3% real return?

- A) 3%
- B) 6%
- C) 8%
- D) 9%

Answer: B

Diff: 2

Topic: The Real-Nominal Principle

Skill: Analytical

AACSB: Analytic Skills

15) Suppose that you lend \$1,000 to a friend and he or she pays you back one year later. What is the opportunity cost of lending the money?

- A) There is no cost.
- B) the real interest rate that would have been earned on the money
- C) the nominal interest rate that would have been earned on the money
- D) the implicit cost of the money

Answer: B

Diff: 3

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

16) You borrow money to buy a house in 2006 at a fixed interest rate of 6.5%. By 2009, the inflation rate has risen to 8.5%. Considering *only* your mortgage, is inflation good news or bad news for you?

- A) bad news, because inflation hurts everyone
- B) bad news, because it makes the real value of your mortgage payments increase
- C) good news, because it makes the real value of your mortgage payments decrease
- D) bad news, because it makes the nominal value of your mortgage payments increase

Answer: C

Diff: 2

Topic: The Real-Nominal Principle

Skill: Analytical

AACSB: Reflective Thinking

17) You borrow money to buy a house in 2006 at a variable interest rate of 6.5%. Your interest rate is always 2% more than the rate of inflation. By 2009, the inflation rate has risen to 8.5%. Considering *only* your mortgage, is inflation good news or bad news for you?

- A) bad news, because inflation hurts everyone
- B) good news, because it makes the real value of your mortgage payments decrease
- C) bad news, because it makes the nominal value of your mortgage payments increase
- D) neither, because your interest rate is tied to the rate of inflation

Answer: D

Diff: 2

Topic: The Real-Nominal Principle

Skill: Analytical

AACSB: Reflective Thinking

18) What is the real value of money?

- A) its face value
- B) its compounded earnings in banks
- C) the quantity of goods and services it can buy
- D) the amount of it you have

Answer: C

Diff: 1

Topic: The Real-Nominal Principle

Skill: Definition

19) What is the nominal value of money?

- A) what can be purchased with the money
- B) discounts taken by multiple purchases
- C) savings by shopping on specific days of the week
- D) its actual face value

Answer: D

Diff: 1

Topic: Nominal Value of Money

Skill: Definition

**Recall Application 5, "The Declining Real Minimum Wage," to answer the following questions:**

20) According to the application, if the nominal minimum wage is unchanged while prices rise, then the real minimum wage:

- A) rises.
- B) declines.
- C) stays the same.
- D) is unaffected.

Answer: B

Diff: 1

Topic: Application 5, The Declining Real Minimum Wage

Skill: Conceptual

AACSB: Reflective Thinking

21) According to the application, if the nominal minimum wage is unchanged while prices fall, then the real minimum wage:

- A) rises.
- B) falls.
- C) stays the same.
- D) is unaffected.

Answer: A

Diff: 1

Topic: Application 5, The Declining Real Minimum Wage

Skill: Conceptual

AACSB: Reflective Thinking

22) According to the application, the weekly income earned in 1974 at that time could buy \_\_\_\_\_ standard baskets of goods and services in 2007.

- A) 1.70
- B) 1.16
- C) 1.54
- D) 2.81

Answer: A

Diff: 1

Topic: Application 5, The Declining Real Minimum Wage

Skill: Fact

23) According to the application, the weekly income earned in 2007 at that time could buy \_\_\_\_\_ standard baskets of goods and services.

- A) 1.70
- B) 1.16
- C) 1.54
- D) 2.81

Answer: B

Diff: 1

Topic: Application 5, The Declining Real Minimum Wage

Skill: Fact

24) According to the application, if the weekly income from 1974 to 2007 increased from \$80 to \$234, but the number of standard baskets of goods that the weekly income decreased from 1.70 to 1.16 in 2007, then we can conclude that:

- A) prices decreased faster than the wage increase between 1974 and 2007.
- B) prices increased faster than the wage increase between 1974 and 2007.
- C) prices increased slower than the wage increase between 1974 and 2007.
- D) prices decreased slower than the wage increase between 1974 and 2007.

Answer: B

Diff: 1

Topic: Application 5, The Declining Real Minimum Wage

Skill: Analytical

AACSB: Analytic Skills

25) According to the application, from 1974 to 2007 as the nominal minimum wage rose from \$2 to \$5.85, the real minimum wage fell.

Answer: FALSE

Diff: 2

Topic: Application 5, The Declining Real Minimum Wage

Skill: Fact

AACSB: Reflective Thinking

**Recall Application 6, "Repaying Student Loans," to answer the following questions:**

26) According to the application, if you are a debtor who owes student loans, you are helped in paying back your student loans by:

- A) unexpected deflation.
- B) unexpected inflation.
- C) expected inflation.
- D) expectedly deflation.

Answer: B

Diff: 2

Topic: Application 6, Repaying Student Loans

Skill: Conceptual

AACSB: Reflective Thinking

27) The application shows that high inflation results in fewer years to pay back student loans because:

- A) when inflation is high, the nominal value of the loan increases.
- B) when inflation is high, the nominal value of wages decreases.
- C) when inflation is high, the nominal value of the loan decreases.
- D) when inflation is high, the nominal value of the wages decrease.

Answer: B

Diff: 2

Topic: Application 6, Repaying Student Loans

Skill: Conceptual

AACSB: Reflective Thinking

28) When prices rise, increases in real income are greater than increases in nominal income.

Answer: FALSE

Diff: 2

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

29) What matters to people is the face value of money or income.

Answer: FALSE

Diff: 1

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

30) If the price level falls faster than the wage rate, then the real wage decreases.

Answer: FALSE

Diff: 1

Topic: The Real-Nominal Principle

Skill: Analytical

AACSB: Analytic Skills

31) The government uses the buying power of wages rather than face value or nominal value in reporting changes in "real wages" in the economy.

Answer: TRUE

Diff: 1

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

32) Is it possible for nominal wages to decrease while real wages increase?

Answer: Yes, though unlikely. This would imply that prices have fallen, and that the decrease is sufficiently negative to offset any losses in nominal wages.

Diff: 1

Topic: The Real-Nominal Principle

Skill: Analytical

AACSB: Reflective Thinking

33) People are interested in how much their money can buy. This is called the \_\_\_\_\_.

Answer: real-nominal principle

Diff: 1

Topic: The Real-Nominal Principle

Skill: Definition

34) What does an increase in prices in retail stores do to the real value of the money you earn as wages?

Answer: An increase in prices in retail stores reduces what you can purchase and thus the real value of earnings.

Diff: 1

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

35) If your salary increases and the cost of goods in stores increase at the same rate, does a unit of money have *more* or *less* buying power?

Answer: Since prices have risen in stores, each unit, i.e. dollar, can buy less and its purchasing power is less.

Diff: 1

Topic: The Real-Nominal Principle

Skill: Conceptual

AACSB: Reflective Thinking

36) Suppose you earn \$50,000 per year in 2009. If your income increases by 8 percent while inflation increases by 10% in 2010, then calculate how much your real income has increased between 2009 and 2010.

Answer: Because inflation increased by 10 percent while nominal income increased only by 8 percent, then the real growth in income between 2009 and 2010 is approximately -2 percent (a loss). A 2 percent loss in real income is approximately \$1,000.

To get the actual amount of the loss:

Your income grows by 8 percent to \$54,000. Because inflation went up by 10 percent, then the real value of your income in 2009 dollars is  $\$54,000/1.10 = 49,090.90$ , or a loss in real income of \$909.10.

Diff: 3

Topic: The Real-Nominal Principle

Skill: Analytical

AACSB: Analytic Skills