# Test Bank for Microeconomics Principles Applications and Tools 9th Edition OSullivan Sheffrin Perez 013407887X 9780134078878 <br> Full link download: <br> Test Bank: <br> https://testbankpack.com/p/test-bank-for-microeconomics-principles-applications-and-tools-9th-edition-osullivan-sheffrin-perez-013407887x-9780134078878/ 

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## Microeconomics: Principles, Applications, and Tools, 9e (O'Sullivan) 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
AACSB: Reflective Thinking
Learning Outcome: Micro-20
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
Learning Outcome: Micro-20
3) The principle 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
AACSB: Reflective Thinking
Learning Outcome: Micro-20

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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
Learning Outcome: Micro-20
5) Jacinda quit her job as a blackjack dealer where she made $\$ 42,000$ per year to start her own florist business. Her business expenses are $\$ 14,000$ per year on rent, $\$ 21,000$ per year on supplies, and $\$ 9,000$ per year on part time help. As for her personal expenses, her apartment costs her $\$ 12,000$ per year and her personal bills are an extra $\$ 6,000$ per year. What is Jacinda's opportunity cost of running the business?
A) $\$ 104,000$
B) $\$ 86,000$
C) $\$ 62,000$
D) $\$ 44,000$

Answer: B
Diff: 2
Topic: The Principle of Opportunity Cost
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
6) An unemployed individual decides to spend the day fishing. The opportunity cost of fishing is
A) the cost of bait and any other monetary expenses.
B) zero, because the person doesn't have a job.
C) the cost of bait, any other monetary expenses, and 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: Analytical Thinking
Learning Outcome: Micro-20
7) 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
Learning Outcome: Micro-20
8) 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 statements 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 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: Analytical Thinking
Learning Outcome: Micro-20
9) You rent a DVD of The Dark Knight Rises. 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 if you decide to watch the movie a second time instead of going to a football game?
A) the entire cost of the movie rental, since you have already watched the movie
B) one half the rental cost, because you have already watched the movie one time
C) the football game you forego by watching the movie again
D) The answer depends on how much you liked the movie in the first place.

Answer: C
Diff: 2
Topic: The Principle of Opportunity Cost
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
10) Angelina, age seven, decides to dress up like Princess Fiona for Halloween. What is the opportunity cost of her decision?
A) the cost of the costume
B) the fact that she can't dress up like Dora the Explorer, her second choice
C) zero, because seven-year-olds don't have opportunity costs
D) the cost of the Lady Gaga costume which she did not want

Answer: B
Diff: 2
Topic: The Principle of Opportunity Cost
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
11) Spending money on a new car instead of a used car when you are on a fixed budget is an example of
A) the incursion of an opportunity cost.
B) isolating variables.
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
Learning Outcome: Micro-20
12) Suppose that your tuition to attend college is $\$ 24,000$ per year and you spend $\$ 8,000$ per year on room and board. If you were working full time, you could earn $\$ 30,000$ per year. What is your opportunity cost of attending college for one year?
A) $\$ 32,000$
B) $\$ 38,000$
C) $\$ 54,000$
D) $\$ 62,000$

Answer: C
Diff: 1
Topic: The Cost of College
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
13) Suppose that your tuition to attend college is $\$ 14,000$ per year and you spend $\$ 5,000$ per year on room and board. If you were working full time, you could earn $\$ 26,000$ per year. What is your opportunity cost of attending college?
A) $\$ 19,000$
B) $\$ 31,000$
C) $\$ 40,000$
D) $\$ 45,000$

Answer: C
Diff: 1
Topic: The Cost of College
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
14) 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
Learning Outcome: Micro-20
15) You have an hour between your economics and math classes. What is the opportunity cost of that time if you use it to complete your math homework instead of your economics homework?
A) the economics homework you could have completed
B) the math homework you chose to complete
C) the cost of your calculator and math textbook
D) zero, because it doesn't cost any money to do your math
homework Answer: A
Diff: 2
Topic: The Cost of College
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
16) The sacrifices made by societies in order to engage in military spending represent
A) the nominal costs of military spending.
B) the real costs of military spending.
C) the opportunity costs of military spending.
D) the excessive costs of military
spending. Answer: C
Diff: 1
Topic: The Cost of Military Spending
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
17) The trade-offs made by the U.S. government to fund the war in Iraq
A) prove that the government is spending too much on the war.
B) show that the government is justified in its war spending.
C) exceed the benefits derived from the war.
D) represent what was potentially sacrificed to engage in the
war. Answer: D
Diff: 1
Topic: The Cost of Military Spending
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
18) According to the possible trade-off example between warships and drinking water in the text, the policy question that should be considered in Malaysia is
A) Do the opportunity costs of the warships exceed their nominal costs?
B) Do the nominal costs of the warships exceed their real costs?
C) Do the benefits of the warships exceed their opportunity costs?
D) Do the real costs of the warships exceed their nominal costs?

Answer: C
Diff: 1
Topic: The Cost of Military Spending
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20

| Bathe | Groom |
| :---: | :---: |
| 0 | 6 |
| 7 | 5 |
| 13 | 4 |
| 18 | 3 |
| 22 | 2 |
| 25 | 1 |
| 27 | 0 |

## Table 2.1

19) Kaitlyn and Larissa have formed a dog bathing and grooming business business. The number of dogs they can bathe or groom in any given day is depicted in Table 2.1. The opportunity cost of grooming the first dog in a day is bathing $\qquad$ $\operatorname{dog}(\mathrm{s})$.
A) 1 B) 2
C) 24 D$)$

25
Answer: B

Diff: 1
Topic: Opportunity Cost and the Production Possibilities Curve
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
20) Kaitlyn and Larissa have formed a dog bathing and grooming business business. The number of dogs they can bathe or groom in any given day is depicted in Table 2.1. The opportunity cost of grooming the third dog in a day is bathing $\qquad$ $\operatorname{dog}(\mathrm{s})$.
A) 3 B) 4
C) 5 D) 18

Answer: B

Diff: 1
Topic: Opportunity Cost and the Production Possibilities Curve
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
21) Kaitlyn and Larissa have formed a dog bathing and grooming business business. The number of dogs they can bathe or groom in any given day is depicted in Table 2.1. The opportunity cost of grooming the sixth dog in a day is bathing $\qquad$ $\operatorname{dog}(\mathrm{s})$.
A) 0 B) 5
C) 6 D$) 7$

Answer: D

Diff: 1
Topic: Opportunity Cost and the Production Possibilities Curve
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
22) Kaitlyn and Larissa have formed a dog bathing and grooming business. The number of dogs they can bathe or groom in any given day is depicted in Table 2.1. As they groom more dogs, the opportunity cost of grooming additional dogs
A) falls.
B) rises.
C) remains constant.
D) depends on the prices being
charged. Answer: B
Diff: 2
Topic: Opportunity Cost and the Production Possibilities Curve
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
23) Kaitlyn and Larissa have formed a dog bathing and grooming business. The number of dogs they can bathe or groom in any given day is depicted in Table 2.1. As they groom more dogs, the opportunity cost of bathing additional dogs
A) falls.
B) rises.
C) remains constant.
D) depends on the prices being charged. Answer: A
Diff: 2
Topic: Opportunity Cost and the Production Possibilities Curve
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20


## Figure 2.1

24) 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 manufactured 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, graphing
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
25) 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, graphing Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
26) Refer to Figure 2.1. If you are producing 600 tons of agricultural products per year, what is the maximum amount of manufactured products you can produce per year?
A) 300 tons
B) 500 tons
C) 600 tons
D) 700 tons

Answer: A
Diff: 1
Topic: Opportunity Cost and the Production Possibilities Curve, graphing
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
27) Refer to Figure 2.1. If you choose to produce only agricultural products, what is the maximum quantity you can produce per year?
A) 200 tons
B) 400 tons
C) 600 tons
D) $>600$ tons

Answer: D
Diff: 1
Topic: Opportunity Cost and the Production Possibilities Curve, graphing
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
28) Refer to Figure 2.1. What is the opportunity cost of increasing production of manufactured products from 500 tons to 600 tons per year?
A) 200 tons of agricultural products per year B) 400 tons of agricultural products per year C) 500 tons of agricultural products per year D) 600 tons of agricultural products
per year Answer: A
Diff: 2
Topic: Opportunity Cost and the Production Possibilities Curve, graphing
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
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 and the Production Possibilities Curve
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
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 and the Production Possibilities Curve
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
31) If an economy is represented by a point inside its production possibilities curve,
A) it can produce more of one product even if it does not produce less of another product.
B) it can produce more of one product only if it produces less of another product.
C) it cannot produce more of one product unless it stops producing the other product entirely.
D) it cannot possibly produce more of one product, even if it produces less of another product.

Answer: A
Diff: 1
Topic: Opportunity Cost and the Production Possibilities Curve
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
32) If an economy is represented by a point along its production possibilities curve,
A) it can produce more of one product even if it does not produce less of another product.
B) it can produce more of one product only if it produces less of another product.
C) it cannot produce more of one product unless it stops producing the other product entirely.
D) it cannot possibly produce more of one product, even if it produces less of another product.

Answer: B
Diff: 1
Topic: Opportunity Cost and the Production Possibilities Curve
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
33) Points outside the production possibilities curve represent combinations of products that are A) attainable only if the economy's resources are fully employed.
B) attainable only if the economy's resources are not fully employed.
C) attainable if the economy's resources are either fully employed or not fully employed. D) unattainable.
Answer: D
Diff: 1
Topic: Opportunity Cost and the Production Possibilities Curve
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20

## Recall the Application about running a lawn-cutting business using solar-powered equipment to answer the following question(s).

34) The time and invested funds involved in starting a lawn-cutting business address the economic concept of
A) the marginal principle.
B) opportunity cost.
C) the real-nominal principle.
D) the principle of diminishing returns.

Answer: B
Diff: 1
Topic: Application 1, Don't Forget the Costs of Time and Invested Funds
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
35) The current income you would sacrifice to start your own lawn-cutting business is part of the
A) opportunity cost of invested funds.
B) opportunity cost of starting a business.
C) cost of doing business.
D) present value of your initial investment.

Answer: B
Diff: 1
Topic: Application 1, Don't Forget the Costs of Time and Invested Funds
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
36) If you have $\$ 10,000$ to start a lawn-cutting business, the interest rate is 4 percent, your cost of equipment is $\$ 3,000$, and the earnings you sacrifice from working at another job are $\$ 32,000$, your yearly cost of doing business would be
A) $\$ 13,000$.
B) $\$ 13,400$.
C) $\$ 35,400$.
D) $\$ 45,000$.

Answer: C
Diff: 2
Topic: Application 1, Don't Forget the Costs of Time and Invested Funds
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
37) 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
AACSB: Reflective Thinking
Learning Outcome: Micro-20
38) Opportunity cost is the difference between the nominal and real cost of some action. Answer: FALSE
Diff: 1
Topic: The Principle of Opportunity Cost
Skill: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-20
39) The opportunity cost of something is the gain you receive as a result of your
sacrifice. Answer: FALSE
Diff: 1
Topic: The Principle of Opportunity Cost
Skill: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-20
40) The opportunity cost of something is the nominal price paid for the product. Answer: FALSE
Diff: 1
Topic: The Principle of Opportunity Cost
Skill: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-20
41) Trade-offs 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: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-20
42) The notion of opportunity cost allows the measurement of trade-offs.

Answer: TRUE
Diff: 1
Topic: The Principle of Opportunity Cost
Skill: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-20
43) In order to get his bachelor's degree, Timothy gave up an offer for a full time job as a
bartender. Therefore, Timothy incurred an opportunity cost.
Answer: TRUE
Diff: 1
Topic: The Cost of College
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
44) The opportunity cost of going to a particular college is not the same for everyone.

Answer: TRUE
Diff: 1
Topic: The Cost of College
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
45) The cost of a bachelor's degree in philosophy equals the tuition plus the cost of room and board. Answer: FALSE
Diff: 1
Topic: The Cost of College
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
46) What is an opportunity cost?

Answer: An opportunity cost is what you sacrifice to get something.
Diff: 1
Topic: The Principle of Opportunity Cost
Skill: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-20
47) Suppose that you lend $\$ 5,000$ to a friend who pays you back $\$ 5,400$ the next year. Suppose that prices that year rose by six percent and the real rate of return in the stock market was five percent. 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 six percent 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 $\$ 5,550$, or an $11 \%$ 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: 2
Topic: The Principle of Opportunity Cost
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
48) 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: 1
Topic: The Principle of Opportunity Cost
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
49) 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. Resources from the economy were used to make that lunch, even though those resources may not belong to you. Consequently, the economy gave up anything else it could have made with the resources it used to make the lunch. The opportunity cost of that lunch is the lost opportunity to use those resources in some other way.
Diff: 2
Topic: The Principle of Opportunity Cost
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
50) 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. Therefore, one should not consider room and board to be part of the cost of college attendance.
Diff: 1
Topic: The Cost of College
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20

### 2.2 The Marginal Principle

1) 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
AACSB: Reflective Thinking
Learning Outcome: Micro-20
2) 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
AACSB: Reflective Thinking
Learning Outcome: Micro-20
3) 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
AACSB: Reflective Thinking
Learning Outcome: Micro-20
4) The marginal principle implies that an individual should produce or consume where
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: C
Diff: 1
Topic: The Marginal Principle
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20

5) Joe runs a business and needs to decide how many hours to stay open. Figure 2.2 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, graphing
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
6) Joe runs a business and needs to decide how many hours to stay open. Figure 2.2 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, graphing
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
7) Joe runs a business and needs to decide how many hours to stay open. Figure 2.2 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 per hour be?
A) $\$ 16$ B)
\$24 C) \$32
D) $\$ 40$

Answer: C

Diff: 1
Topic: The Marginal Principle, graphing
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
8) Joe runs a business and needs to decide how many hours to stay open. Figure 2.2 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 per hour be?
A) $\$ 24 \mathrm{~B})$
\$32 C) \$40
D) $\$ 48$

Answer: D

Diff: 1
Topic: The Marginal Principle, graphing
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
9) Joe runs a business and needs to decide how many hours to stay open. Figure 2.2 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 per hour be?
A) $\$ 16$ B)
\$24 C) \$32
D) $\$ 48$

Answer: B

Diff: 1
Topic: The Marginal Principle, graphing
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20

| Hours of Operation | Marginal Cost |
| :---: | :---: |
| 1 | 6 |
| 2 | 12 |
| 3 | 18 |
| 4 | 24 |
| 5 | 30 |
| 6 | 36 |
| 7 | 42 |

## Table 2.2

10) Krystal runs a nail salon 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 Krystal's marginal benefit of staying open per hour is $\$ 30$. If she is following the marginal principle, how many hours should Krystal 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: Analytical Thinking
Learning Outcome: Micro-20
11) Krystal runs a nail salon 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 Krystal's marginal benefit of staying open per hour is $\$ 18$. If she is following the marginal principle, how many hours should Krystal 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: Analytical Thinking
Learning Outcome: Micro-20
12) Krystal runs a nail salon 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 Krystal staying open 4 hours per day. If she is following the marginal principle, what must her marginal benefit be?
A) $\$ 12$ B)
\$18C) \$24
D) $\$ 30$

Answer: C

Diff: 1
Topic: The Marginal Principle
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
13) Krystal runs a nail salon 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 Krystal staying open 2 hours per day. If she is following the marginal principle, what must her marginal benefit be?
A) $\$ 6$ B)
\$12 C) \$15
D) $\$ 18$

Answer: B

Diff: 1
Topic: The Marginal Principle
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
14) Krystal runs a nail salon 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 Krystal staying open 5 hours and her marginal benefit of staying open per hour is $\$ 18$. If she is following the marginal principle, Krystal should
A) stay open 2 more hours.
B) stay open 3 more hours.
C) stay open 2 fewer hours.
D) stay open 3 fewer hours.

Answer: C
Diff: 2
Topic: The Marginal Principle
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
15) Krystal runs a nail salon 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 Krystal staying open 5 hours and her marginal benefit of staying open per hour is $\$ 36$. If she is following the marginal principle, Krystal should
A) stay open 1 more hour.
B) stay open 2 more hours.
C) stay open 1 fewer hour.
D) stay open 2 fewer hours.

Answer: A
Diff: 2
Topic: The Marginal Principle
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
16) Considering how a change in one variable affects the value of another variable is called A) the Peter Principle.
B) the marginal principle.
C) the principle of supply and demand.
D) functional decision
making. Answer: B
Diff: 1
Topic: The Marginal Principle
Skill: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-20
17) When referring to "marginal" changes, the economic focus is on A) changes which 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
Learning Outcome: Micro-20
18) 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
Learning Outcome: Micro-20

## Recall the Application about the best speed at which to sail an ocean cargo ship to answer the following question(s).

19) Weighing the benefits and costs of the different speeds at which to sail an ocean cargo ship addresses the economic concept known as
A) the principle of opportunity cost.
B) the marginal principle.
C) the principle of voluntary exchange.
D) the principle of diminishing
returns. Answer: B
Diff: 1
Topic: Application 2, How Fast to Sail?
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
20) Sailing an ocean cargo ship slower to save on the expense of fuel as opposed to sailing it faster to save time and therefore allow it to make more deliveries makes sense if the $\qquad$ of sailing slower is less than the $\qquad$ of sailing slower.
A) marginal benefit; marginal cost $B$ )
marginal cost; marginal benefit $C$ )
marginal benefit; opportunity cost
D) marginal cost; opportunity cost

Answer: B
Diff: 1
Topic: Application 2, How Fast to Sail?
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
21) The use of seat belts and other automobile safety features making bicycling more hazardous can be explained by the economic concept known as
A) the real-nominal principle.
B) the marginal principle.
C) the principle of voluntary exchange.
D) the principle of diminishing
returns. Answer: B
Diff: 1
Topic: Driving Speed and Safety
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
22) Saving time by driving faster is an example of a $\qquad$ of driving faster. Increasing the severity of injuries from a potential accident due to driving faster is a(n) $\qquad$ of driving faster.
A) nominal cost; real cost
B) marginal cost; nominal cost
C) marginal benefit; marginal cost
D) normative benefit; opportunity cost

Answer: C
Diff: 1
Topic: Driving Speed and Safety
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
23) 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
Learning Outcome: Micro-20
24) When applying the marginal principle, you should pick the level at which the activity's marginal benefit is less than its marginal cost.
Answer: FALSE
Diff: 1
Topic: The Marginal Principle
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
25) Basically, the marginal principle helps us to evaluate the factors involved in taking an action or if doing something is worth the effort.
Answer: TRUE
Diff: 1
Topic: The Marginal Principle
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
26) When Lonnie produces 1 pair of cowboy boots his costs total $\$ 300$. When he produces 2 pairs of cowboy boots his total costs are $\$ 500$. This means that Lonnie's marginal cost of producing the second pair of cowboy boots is $\$ 200$.
Answer: TRUE
Diff: 2
Topic: The Marginal Principle
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
27) 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
Learning Outcome: Micro-20
28) If a company's total costs per day increase from $\$ 200$ to $\$ 400$ by adding another worker, but its additional benefits are $\$ 300$, it is sensible to add that additional worker.
Answer: TRUE
Diff: 2
Topic: The Marginal Principle
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
29) What is a marginal cost?

Answer: A marginal cost is the additional cost resulting from a small increase in the production of a good.
Diff: 1
Topic: The Marginal Principle
Skill: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-20
30) What is a marginal benefit?

Answer: A marginal benefit is the additional benefit resulting from a small increase in the production of a good.
Diff: 1
Topic: The Marginal Principle
Skill: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-20
31) 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: Marginal Principle
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-20
32) 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, or marginal, benefit of staying open (say, the increased revenues) each extra hour exceeds (or at least equals) the incremental, or marginal, costs (e.g., electricity, wages, etc.) incurred from staying open that hour.
Diff: 2
Topic: Marginal Principle
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20
33) 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 (such as 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
Learning Outcome: Micro-20
34) Use the marginal principle to explain why government mandated safety features in automobiles during the 1960s and 1970s resulted in an increase in collisions between automobiles and bicycles. Answer: The mandated safety features decreased the marginal cost of speed: People who wear seat belts suffer less severe injuries in a collision, so every additional unit of speed is less costly to the driver. Drivers felt more secure because they were better insulated from harm in the event of a collision, and so they drove faster. As a result, the number of collisions between cars and bicycles increased, meaning that a safer environment for drivers led to a more hazardous environment for bicyclists.
Diff: 2
Topic: Driving Speed and Safety
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-20

### 2.3 The Principle of Voluntary Exchange

1) People acting in their own self-interest is the basis of
the A) principle of supply and demand.
B) principle of voluntary exchange.
C) real-nominal principle.
D) principle of
scarcity. Answer: B
Diff: 1
Topic: The Principle of Voluntary Exchange
Skill: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-3
2) The principle of voluntary exchange is based on the idea of
A) making assumptions.
B) isolating variables.
C) thinking at the margin.
D) rational self-interest.

Answer: D
Diff: 1
Topic: The Principle of Voluntary Exchange
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-3

Recall the Application about Rory McIlroy and weed-whacking to answer the following question(s). The Application assumes that Rory McIlroy could whack down all the weeds on his estate in one hour at an opportunity cost of $\$ 1,000$, but it would take 20 hours for a gardener to do it at a price of $\$ 10$ per hour.
3) This Application addresses the economic concept of
A) the marginal principle.
B) diminishing returns.
C) specialization and
exchange. D) real versus
nominal costs. Answer: C
Diff: 1
Topic: Application 3, Rory Mcllroy and Weed-Whacking
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-3
4) Based on the assumptions in the Application, should Rory hire a gardener or cut the weeds himself? A) He should hire the gardener because he would save $\$ 1,000$.
B) He should hire the gardener because he would save $\$ 800$.
C) He should cut the weeds himself because he would save $\$ 200$.
D) He should cut the weeds himself because he would save $\$ 1,000$.

Answer: B
Diff: 2
Topic: Application 3, Rory Mcllroy and Weed-Whacking
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-3
5) If Rory McIlroy only earned $\$ 500$ per hour playing golf instead of $\$ 1,000$ per hour, what should he do?
A) He should still hire the gardener.
B) He should do the weed-whacking himself.
C) He should hire a less-productive gardener.
D) He should be indifferent as to who does the weed-whacking, for the difference in hourly earnings would now be insignificant.
Answer: A
Diff: 2
Topic: Application 3, Rory Mcllroy and Weed-Whacking
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-3
6) 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
Learning Outcome: Micro-3
7) 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
AACSB: Reflective Thinking
Learning Outcome: Micro-3
8) A "market" is an arrangement that allows people to exchange things.

Answer: TRUE
Diff: 1
Topic: Exchange and Markets
Skill: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-3

### 2.4 The Principle of Diminishing Returns

1) The principle of diminishing returns implies that as one input increases while the other inputs are held fixed, output
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
AACSB: Reflective Thinking
Learning Outcome: Micro-1
2) The principle that "as one input increases while the other inputs are held fixed, output 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
AACSB: Reflective Thinking
Learning Outcome: Micro-1
3) 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)
remain unchanged.
Answer: B
Diff: 2
Topic: The Principle of Diminishing Returns
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-1
4) 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 percent. 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
Learning Outcome: Micro-1
5) 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) increase 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
Learning Outcome: Micro-1

| Units of Capital | Number of Workers | Output/Day |
| :---: | :---: | :---: |
| 5 | 0 | 0 |
| 5 | 1 | 40 |
| 5 | 2 | 90 |
| 5 | 3 | 150 |
| 5 | 4 | 200 |
| 5 | 5 | 235 |

Table 2.3
6) Refer to Table 2.3. What can be observed about the given resources? A) Capital and labor are both fixed.
B) Capital is variable.
C) Capital is fixed.
D) Labor is fixed.

Answer: C
Diff: 1
Topic: The Principle of Diminishing Returns
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-1
7) Refer to Table 2.3. Increasing the number of workers from 2 to 3 will increase output per day by A) 60 units.
B) 90 units.
C) 150 units.
D) 240 units.

Answer: A
Diff: 1
Topic: The Principle of Diminishing Returns
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
8) Refer to Table 2.3. The principle of diminishing returns first occurs when how many workers are hired? A) 2
B) 3 C) 4
D) 5

Answer: C

Diff: 2
Topic: The Principle of Diminishing Returns
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1

| Acres of Land | Tanks of Fertilizer | Truckloads of <br> Potatoes |
| :---: | :---: | :---: |
| 20 | 0 | 28 |
| 20 | 1 | 70 |
| 20 | 2 | 105 |
| 20 | 3 | 135 |
| 20 | 4 | 152 |
| 20 | 5 | 141 |

Table 2.4
9) Refer to Table 2.4. What can be observed about the given resources? A) Land is variable but fertilizer is fixed.
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
Learning Outcome: Micro-1
10) Refer to Table 2.4. Increasing the tanks of fertilizer from 3 to 4 will increase the truckloads of potatoes by
A) 152 .
B) 35 .
C) 17 .
D) 11 .

Answer: C
Diff: 1
Topic: The Principle of Diminishing Returns
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
11) Refer to Table 2.4. Increasing the tanks of fertilizer from 4 to 5 will
A) increase truckloads of potatoes.
B) decrease truckloads of potatoes.
C) have no effect on truckloads of potatoes.
D) require more acres of land.

Answer: B
Diff: 1
Topic: The Principle of Diminishing Returns
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
12) Refer to Table 2.4. The principle of diminishing returns sets in with the addition of the $\qquad$ tank of fertilizer.
A) second
B) third C)
fourth D)
fifth
Answer: A
Diff: 2
Topic: The Principle of Diminishing Returns
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
13) Diminishing returns occurs because
A) not enough people have jobs.
B) one of the inputs in the production process is fixed.
C) consumers don't buy enough of the products produced.
D) two people have not satisfied their self-
interests. Answer: B
Diff: 1
Topic: The Principle of Diminishing Returns
Skill: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-1

Recall the Application about the use of fertilizer and its impact on crop yields to answer the following question(s). The table is taken from this Application.

Fertilizer and Corn Yield

| Bags of Fertilizer | Bushels of Corn |
| :---: | :---: |
| 0 | 85 |
| 1 | 120 |
| 2 | 135 |
| 3 | 144 |
| 4 | 147 |

14) Based on the data in the table, this Application addresses the economic concept of A) the marginal principle.
B) the principle of voluntary exchange.
C) the principle of diminishing returns.
D) the real-nominal principle.

Answer: C
Diff: 1
Topic: Application 4, Fertilizer and Crop Yields
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-1
15) Refer to the table above. After applying the second bag of fertilizer, the farmer
experienced A) increasing returns.
B) diminishing returns.
C) constant returns. D) negative returns.
Answer: B
Diff: 1
Topic: Application 4, Fertilizer and Crop Yields
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
16) Refer to the table above. The farmer increased his total production of corn by 9 bushels per acre after applying
A) the first bag of fertilizer.
B) the second bag of fertilizer.
C) the third bag of fertilizer.
D) the fourth bag of fertilizer.

Answer: C
Diff: 2
Topic: Application 4, Fertilizer and Crop Yields
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
17) Refer to the table above. The farmer began to experience diminishing returns after applying how many bags of fertilizer?
A) 1 B) 2
C) 3 D) 4

Answer: A

Diff: 2
Topic: Application 4, Fertilizer and Crop Yields
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
18) 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
Learning Outcome: Micro-1
19) Explain the concept of diminishing returns.

Answer: The principle of diminishing returns shows that in the short run, beyond some point, output will increase at a decreasing rate. For example, producing more output in an existing production facility by increasing the number of workers sharing the facility will bring into effect the principle of diminishing returns, as output will eventually increase but at a decreasing rate.
Diff: 1
Topic: The Principle of Diminishing Returns
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-1
20) 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 use of the tools, or for transportation to the next job. This is the prediction of the principle of diminishing returns.
Diff: 2
Topic: The Principle of Diminishing Returns
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-1

### 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
AACSB: Reflective Thinking
Learning Outcome: Micro-1
2) The principle that states 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
AACSB: Reflective Thinking
Learning Outcome: Micro-1
3) The face value of money or income is called its $\qquad$ value.
A) real
B) marginal
C) nominal
D) external

Answer: C
Diff: 1
Topic: The Real-Nominal Principle
Skill: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-1
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
AACSB: Reflective Thinking
Learning Outcome: Micro-1
5) The real value of money
A) is another word for the face value.
B) reflects the purchasing power of money.
C) matters less to people than its nominal value.
D) is the same as its nominal value.

Answer: B
Diff: 1
Topic: The Real-Nominal Principle
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-1
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
Learning Outcome: Micro-1
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: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
8) A Major League Baseball player signs a contract that pays $\$ 27$ million over 5 years. The $\$ 27$ million is the contract's $\qquad$ value.
A) real
B) implicit
C) external
D) nominal

Answer: D
Diff: 1
Topic: The Real-Nominal Principle
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-1
9) Suppose your bank pays you 4 percent interest per year on your savings account, so that $\$ 1,000$ grows to $\$ 1,040$ over a one-year period. If prices increase by 1 percent per year over that time, approximately how much real value do you gain by keeping $\$ 100$ in the bank for a year?
A) $\$ 0 \mathrm{~B})$
\$10 C) \$30
D) $\$ 50$

Answer: C

Diff: 2
Topic: The Real-Nominal Principle
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
10) Suppose your bank pays you 5 percent interest per year on your savings account. If prices increase by 5 percent 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) $\$ 3 \mathrm{D}) \$ 6$

Answer: A

Diff: 2
Topic: The Real-Nominal Principle
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
11) 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
Learning Outcome: Micro-1
12) You borrow money to buy a house in 2009 at a fixed interest rate of 5.5 percent. By 2012, the inflation rate has steadily fallen to 1.5 percent from the recent high of 3.0 percent in 2009. 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: B
Diff: 2
Topic: The Real-Nominal Principle
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
13) 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: The Real-Nominal Principle
Skill: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-1
14) What is the real value of money?
A) its face value
B) its compounded earnings in banks
C) the quantity of goods it can buy D)
the ability of shop at market prices
Answer: C
Diff: 1
Topic: The Real-Nominal Principle
Skill: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-1

|  | 1974 | 2011 |
| :--- | :---: | :---: |
| Minimum wage per hour | $\$ 2.00$ | $\$ 7.25$ |
| Weekly income from minimum wage | $\$ 80.00$ | $\$ 290.00$ |
| Cost of a standard basket of goods | $\$ 47.00$ | $\$ 225.00$ |
| Number of baskets per week | 1.70 | 1.29 |

## Table 2.5

15) Refer to Table 2.5 above. Comparing the minimum wages between 1974 and 2011 addresses the economic concept of
A) the marginal principle.
B) the principle of voluntary exchange.
C) the principle of diminishing returns.
D) the real-nominal principle.

Answer: D
Diff: 1
Topic: The Value of the Minimum Wage
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-1
16) Refer to Table 2.5 above. The nominal value of the minimum wage in 2011 was
A) $\$ 2.00$ per hour.
B) $\$ 3.63$ per hour.
C) $\$ 5.62$ per hour.
D) $\$ 7.25$ per hour.

Answer: D
Diff: 1
Topic: The Value of the Minimum Wage
Skill: Fact
AACSB: Reflective Thinking
Learning Outcome: Micro-1
17) Refer to Table 2.5 above. What happened to the real value of the minimum wage between 1974 and 2011?
A) It remained the same.
B) It increased.
C) It decreased.
D) It could not be determined from the given information.

Answer: C
Diff: 2
Topic: The Value of the Minimum Wage
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
18) Refer to Table 2.5 above. By what percentage did the federal minimum wage increase from 1974 to 2011?
A) 72.41 percent
B) 262.5 percent
C) 362.5 percent
D) 525.0 percent

Answer: B
Diff: 2
Topic: The Value of the Minimum Wage
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
Recall the Application about the impact inflation has on your potential future salary and the repayment of student loans to answer the following question(s).
19) In considering the costs involved for student loans that must be repaid in ten years, this Application is addressing the economic concept of
A) the marginal principle.
B) the principle of voluntary exchange.
C) the principle of diminishing returns.
D) the real-nominal principle.

Answer: D
Diff: 1
Topic: Application 5, Repaying Student Loans
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-1
20) According to this Application, more years of work would be required to pay off a student loan if all prices
A) remained stable.
B) increased by 20 percent.
C) decreased by 10
percent. D) increased by 40
percent. Answer: C
Diff: 1
Topic: Application 5, Repaying Student Loans
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
21) According to this Application, if you earn a salary of $\$ 80,000$ in the first year and all prices decrease by half in the next 5 years, what will your nominal annual salary be in 5 years?
A) $\$ 8,000$
B) $\$ 10,000$
C) $\$ 20,000$
D) $\$ 40,000$

Answer: D
Diff: 2
Topic: Application 5, Repaying Student Loans
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
22) According to this Application, if you earn a salary of $\$ 40,000$ in the first year and all prices triple in the next 10 years, what will your nominal annual salary be in 10 years?
A) $\$ 20,000$
B) $\$ 60,000$
C) $\$ 120,000$
D) $\$ 180,000$

Answer: C
Diff: 2
Topic: Application 5, Repaying Student Loans
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
23) When product prices increase slower than nominal wages increase, the real value of wages decreases. Answer: FALSE
Diff: 2
Topic: The Real-Nominal Principle
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-1
24) If product prices decrease more than nominal wages decrease, the real value of wages will increase. Answer: TRUE
Diff: 2
Topic: The Real-Nominal Principle
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-1
25) 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
Learning Outcome: Micro-1
26) What matters to people is the real value of money or income. Answer: TRUE
Diff: 1
Topic: The Real-Nominal Principle
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-1
27) 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
Learning Outcome: Micro-1
28) The government uses the buying power of wages in reporting changes in "nominal wages" in the economy.
Answer: FALSE
Diff: 1
Topic: The Real-Nominal Principle
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-1
29) 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: 2
Topic: The Real-Nominal Principle
Skill: Analytical
AACSB: Analytical Thinking
Learning Outcome: Micro-1
30) Explain the real-nominal principle.

Answer: The real-nominal principle explains that what matters to people is the real value of money or income-its purchasing power - and not the face value of money or income.
Diff: 1
Topic: The Real-Nominal Principle
Skill: Definition
AACSB: Reflective Thinking
Learning Outcome: Micro-1
31) How would an increase in prices in retail stores change the real value of the money you earn as wages?
Answer: The real value would decrease.
Diff: 1
Topic: The Real-Nominal Principle
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-1
32) If your salary increases at a lower rate than prices are increasing, what would happen to your buying power?
Answer: Your money would have less buying power.
Diff: 1
Topic: The Real-Nominal Principle
Skill: Conceptual
AACSB: Reflective Thinking
Learning Outcome: Micro-1

## Microeconomics: Principles, Applications, and Tools, 9e (O'Sullivan) TB2 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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
4) When Bob has to give up lunch in order to have a fancy dinner, the economic principle that is highlighted by his situation is 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 Skills
Learning Outcome: Micro-1
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
Learning Outcome: Micro-1
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
Learning Outcome: Micro-1
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) $\$ 43,000$
B) $\$ 57,000$
C) $\$ 65,000$
D) $\$ 71,000$

Answer: C
Diff: 2
Topic: The Principle of Opportunity Cost
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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
Learning Outcome: Micro-1
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 Learning
Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
13) Five years ago, Tammy always took a big envelope full of coupons to the grocery store. Now that 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 Learning
Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 did not 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 Skills
Learning Outcome: Micro-1
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 statements is most correct?
A) Steven has a lower opportunity cost of owning a car than does 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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1


Figure 2.1
22) Referring to Figure 2.1, if you increase the production of agricultural products, what other area is affected?
A) the price of produce
B) the production of manufactured goods
C) how much people can purchase
D) the wages earned by farm workers

Answer: B
Diff: 1
Topic: Opportunity Cost \& Production Possibilities Curve, graph
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-1
23) The production possibilities curve in Figure 2.1 illustrates the notion of A) increased manufactured goods production.
B) increased agricultural production.
C) diminishing resources.
D) opportunity cost.

Answer: D
Diff: 1
Topic: Opportunity Cost \& Production Possibilities Curve, graph
Skill: Analytical AACSB:
Analytic Skills Learning
Outcome: Micro-1
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 manufactured goods
A) rises.
B) falls.
C) is constant.
D) becomes
negative. Answer: A
Diff: 3
Topic: Opportunity Cost \& Production Possibilities Curve, graph
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-1
25) On the production possibilities curve in Figure 2.1, the opportunity costs of increasing agricultural production from 200 tons to 400 tons is $\qquad$ tons of manufactured products.
A) 600 B$)$

500 C) 200
D) 100

Answer: D

Diff: 2
Topic: Opportunity Cost \& Production Possibilities Curve, graph
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-1
26) On the production possibilities curve in Figure 2.1, the opportunity costs of increasing agricultural production from 400 tons to 600 tons is $\qquad$ tons of manufactured products.
A) 600 B$)$

500 C) 200
D) 100

Answer: C

Diff: 2
Topic: Opportunity Cost \& Production Possibilities Curve, graph
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-1
27) On the production possibilities curve in Figure 2.1, the gain from decreasing manufacturing production from 700 tons to 500 tons is $\qquad$ tons of agricultural products.
A) 500
B) 400
C) 200
D) 100

Answer: B
Diff: 2
Topic: Opportunity Cost \& Production Possibilities Curve, graph
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-1
28) On the production possibilities curve in Figure 2.1, the gain from decreasing manufacturing production from 500 tons to 300 tons is $\qquad$ tons of agricultural products.
A) 700
B) 500
C) 200
D) 100

Answer: C
Diff: 2
Topic: Opportunity Cost \& Production Possibilities Curve, graph
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1

Thousands of people provided withmedical care


Figure 2.2
31) Figure 2.2 presents a production possibilities curve for a given year for a country that can either produce highways or provide people with medical care. The opportunity cost of the second new highway built in a year is $\qquad$ people provided with medical care.
A) 30,000
B) 40,000
C) 50,000
D) 500,000

Answer: A
Diff: 1
Topic: Opportunity Cost \& Production Possibilities Curve, graph
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-1
32) Figure 2.2 presents a production possibilities curve for a given curve for a country that can either produce highways or provide people with medical care. The opportunity cost of the third new highway built in a year is $\qquad$ people provided with medical care.
A) 10,000
B) 50,000
C) 90,000
D) 450,000

Answer: B
Diff: 1
Topic: Opportunity Cost \& Production Possibilities Curve, graph
Skill: Analytical AACSB:
Analytic Skills Learning
Outcome: Micro-1
33) Figure 2.2 presents a production possibilities curve for a given year for a country that can either produce highways or provide people with medical care. 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 Learning
Outcome: Micro-1
34) Figure 2.2 presents a production possibilities curve for a given year for a country that can either produce highways or provide people with medical care. 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 Learning
Outcome: Micro-1
35) Figure 2.2 presents a production possibilities curve for a given year for a country that can either produce highways or provide people with medical care. 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
Learning Outcome: Micro-1
36) Figure 2.2 presents a production possibilities curve for a given year for a country that can either produce highways or provide people with medical care. 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
Learning Outcome: Micro-1
37) Figure 2.2 presents a production possibilities curve for a given year for a country that can either produce highways or provide people with medical care. The opportunity cost of the fourth new highway built in a year is $\qquad$ people provided with medical care.
A) 30,000
B) 50,000
C) 70,000
D) 90,000

Answer: C
Diff: 2
Topic: Opportunity Cost \& Production Possibilities Curve, graph
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-1

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

Table 2.1
38) 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
Learning Outcome: Micro-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 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
Learning Outcome: Micro-1
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 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
Learning Outcome: Micro-1
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. 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 Learning
Outcome: Micro-1
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 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 Skills
Learning Outcome: Micro-1


Figure 2.3
43) In Figure 2.3, the movement from production possibility curve $X V$ to production possibility curve $Y Z$ 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
Learning Outcome: Micro-1
44) 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 Learning
Outcome: Micro-1
45) 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 Learning
Outcome: Micro-1
46) In Figure 2.3, an efficient production point on production possibility curve $X V$ 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
Learning Outcome: Micro-1
47) In Figure 2.3, an efficient production point on production possibility curve $Y Z$
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
Learning Outcome: Micro-1
48) In Figure 2.3, the movement from production possibility curve $Y Z$ to production possibility curve $X V$ 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
Learning Outcome: Micro-1

## Recall the Application about running a lawn-cutting business using solar-powered equipment to answer the following question(s).

49) 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 Skills
Learning Outcome: Micro-1
50) According to the Application, the opportunity cost of your time should be $\qquad$ the opportunity cost of your invested funds.
A) added to
B) subtracted from
C) multiplied with
D) divided by

Answer: A
Diff: 2
Topic: Application 1, Don't Forget the Costs of Time and Invested Funds
Skill: Conceptual
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
51) According to the Application, the opportunity cost of your invested capital is
A) the interest you could get if you invested in a savings account.
B) zero.
C) the revenue you could get once the capital is used.
D) the sum of the value of all your equipment.

Answer: A
Diff: 1
Topic: Application 1, Don't Forget the Costs of Time and Invested Funds
Skill: Conceptual
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
52) Using figures from the Application, $\$ 5,000$ (which is the market value of all your equipment) is the A) invested capital.
B) opportunity cost of the invested capital.
C) the opportunity cost of running the business.
D) opportunity cost of your time.

Answer: A
Diff: 1
Topic: Application 1, Don't Forget the Costs of Time and Invested Funds
Skill: Conceptual
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
53) Using figures from the Application, the opportunity cost of running your business
A) should only include the opportunity cost of the invested capital.
B) should include your invested capital.
C) should not include the invested capital.
D) should only include the opportunity cost of your time.

Answer: C
Diff: 1
Topic: Application 1, Don't Forget the Costs of Time and Invested Funds
Skill: Conceptual
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
54) 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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
55) 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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
56) 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 Skills
Learning Outcome: Micro-1
57) 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 Skills
Learning Outcome: Micro-1
58) 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 Skills
Learning Outcome: Micro-1
59) 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 Skills
Learning Outcome: Micro-1
60) 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 Skills
Learning Outcome: Micro-1
61) The opportunity cost of something is what you sacrifice to get it.

Answer: TRUE
Diff: 1
Topic: The Principle of Opportunity Cost
Skill: Definition
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
62) Trade-offs 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 Skills
Learning Outcome: Micro-1
63) The notion of opportunity cost allows the measurement of trade-offs.

Answer: TRUE
Diff: 1
Topic: The Principle of Opportunity Cost
Skill: Conceptual
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
64) 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 Skills
Learning Outcome: Micro-1
65) 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 Skills
Learning Outcome: Micro-1
66) 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 Learning
Outcome: Micro-1
67) 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 Skills
Learning Outcome: Micro-1
68) By making acquisitions, resources are used that could have been used to $\qquad$ .
Answer: acquire something else
Diff: 1
Topic: The Principle of Opportunity Cost
Skill: Conceptual
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1

### 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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
3) The marginal principle states that "we should increase the level of an activity as long
as A) its marginal benefit exceeds it 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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 $\$ 200$ million.
B) The firm believes that the marginal cost is larger than $\$ 200$ million. C)

The firm believes that the marginal benefit is larger than $\$ 200$ million.
D) The firm believes that the marginal cost is less than $\$ 200$ million.

Answer: A
Diff: 1
Topic: The Marginal Principle
Skill: Analytical
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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) $\$ 50$.
B) $\$ 11$.
C) $\$ 10$.
D) $\$ 6$.

Answer: D
Diff: 1
Topic: The Marginal Principle
Skill: Analytical AACSB:
Analytic Skills Learning
Outcome: Micro-1
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)
\$6. C) \$5.
D) $\$ 1$.

Answer: D

Diff: 1
Topic: The Marginal Principle
Skill: Analytical AACSB:
Analytic Skills Learning
Outcome: Micro-1


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 Learning
Outcome: Micro-1
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 Learning
Outcome: Micro-1
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 Learning
Outcome: Micro-1
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
Learning Outcome: Micro-1
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
Learning Outcome: Micro-1
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 Learning
Outcome: Micro-1
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 Learning
Outcome: Micro-1

| Hours ofoperation | 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
Learning Outcome: Micro-1
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
Learning Outcome: Micro-1
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
Learning Outcome: Micro-1
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) $\$ 10 \mathrm{~B})$
\$16 C) \$20
D) $\$ 24$

Answer: C

Diff: 1
Topic: The Marginal Principle
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-1
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 Learning
Outcome: Micro-1
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 Learning
Outcome: Micro-1
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
Learning Outcome: Micro-1
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 Learning
Outcome: Micro-1
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
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1

## Recall the Application about the best speed at which to sail an ocean cargo ship to answer the following question(s).

34) Based on the Application, the marginal benefit of sailing a ship faster is A) more cargo delivered per year.
B) more fuel cost incurred.
C) less fuel costs incurred.
D) less cargo delivered per year.

Answer: A
Diff: 1
Topic: Application 2, How Fast to Sail
Skill: Conceptual
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
35) Based on the Application, the marginal cost of sailing a ship faster
is A) more cargo delivered per year.
B) more fuel cost incurred.
C) less fuel costs incurred.
D) less cargo delivered per year.

Answer: B
Diff: 1
Topic: Application 2, How Fast to Sail
Skill: Conceptual
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
36) Based on the Application, a ship captain will decide to sail a ship slower if
A) the marginal benefit of a faster sail is less than the marginal cost.
B) the marginal benefit of a faster sail is more than the marginal cost.
C) the marginal benefit of a faster sail is equal than the marginal cost.
D) the marginal benefit of a faster sail is positive.

Answer: A
Diff: 1
Topic: Application 2, How Fast to Sail
Skill: Conceptual
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
37) Based on the Application, if the total cost of sailing a ship faster exceeds the total benefit of sailing the ship faster, then
A) the captain should sail the ship faster.
B) the captain should sail the ship slower.
C) the captain should keep the speed the
same. D) None of the answers above are
correct. Answer: D
Diff: 1
Topic: Application 2, How Fast to Sail
Skill: Conceptual
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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 Learning
Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 $\qquad$ -.
Answer: marginal principle
Diff: 1
Topic: The Marginal Principle
Skill: Definition
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
47) The additional cost resulting from a one unit increase in the production of a good is known as the
$\qquad$ -.
Answer: marginal cost
Diff: 1
Topic: The Marginal Principle
Skill: Definition
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
48) Is marginal cost the additional cost resulting from a large or small increase in some activity? Answer: small
Diff: 1
Topic: The Marginal Principle
Skill: Definition
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1

### 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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1

Recall the Application about Rory McIlroy and weed-whacking to answer the following question(s). The Application assumes that Rory McIlroy could whack down all the weeds on his estate in one hour at an opportunity cost of $\$ 1,000$, but it would take 20 hours for a gardener to do it at a price of $\$ 10$ per hour.
7) Based on the assumptions in the Application, Rory McIlroy would be indifferent to hiring a gardener and whacking the weeds himself if the hourly rate for a gardener was
A) $\$ 10$. B)
$\$ 200$. C)
$\$ 800$. D)
\$1,000
Answer: D
Diff: 1
Topic: Application 3, Rory McIlroy and Weed-Whacking
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-3
8) If Rory McIlroy had to pay his gardener $\$ 20$ per hour instead of $\$ 10$ per hour, what should he do?
A) He should still hire the gardener.
B) He should do the weed-whacking himself.
C) He should hire a less-productive gardener.
D) He should be indifferent as to who does the weed-whacking, for the difference in hourly earnings would now be insignificant.
Answer: A
Diff: 2
Topic: Application 3, Rory Mcllroy and Weed-Whacking
Skill: Analytical AACSB:
Analytic Skills Learning
Outcome: Micro-3
9) 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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
10) 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 Skills
Learning Outcome: Micro-1
11) 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 Skills
Learning Outcome: Micro-1
12) 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 Skills
Learning Outcome: Micro-1
13) 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 Skills
Learning Outcome: Micro-1
14) 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 Skills
Learning Outcome: Micro-1
15) A "market" is an arrangement that enables people to exchange goods and services.

Answer: TRUE
Diff: 1
Topic: Exchange and Markets
Skill: Definition
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
16) 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 Skills
Learning Outcome: Micro-1
17) 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 Skills
Learning Outcome: Micro-1
18) If each of us could produce everything we needed for ourselves, we would be considered to be
$\qquad$ —.
Answer: self-sufficient
Diff: 1
Topic: Exchange and Markets
Skill: Definition
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
19) 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 Skills
Learning Outcome: Micro-1

### 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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
3) Diminishing returns occur 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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1

| 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 Skills
Learning Outcome: Micro-1
9) Refer to Table 2.3. The marginal product of the 4 th 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 Learning
Outcome: Micro-1
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
Learning Outcome: Micro-1
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 Learning
Outcome: Micro-1
12) Refer to Table 2.3. The marginal product of the 2 nd 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 Learning
Outcome: Micro-1
13) Refer to Table 2.3. The principle of diminishing returns sets in with the addition of the $\qquad$ worker.
A) 1st B)

2nd C) 3rd
D) 4 th

Answer: B

Diff: 2
Topic: The Principle of Diminishing Returns
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-1

| 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 Skills
Learning Outcome: Micro-1
15) Refer to Table 2.4. The marginal product of the 3rd tank of fertilizer is
A) 29.33 truckloads of fruit.
B) 20 truckloads of fruit.
C) 5 truckloads of fruit.
D) 1.67 truckloads of
fruit. Answer: C
Diff: 1
Topic: The Principle of Diminishing Returns
Skill: Analytical AACSB:
Analytic Skills Learning
Outcome: Micro-1
16) Refer to Table 2.4. The marginal product of the 2 nd tank of fertilizer
is A) 41.5 truckloads of fruit.
B) 20 truckloads of fruit.
C) 10 truckloads of
fruit. D) 5 truckloads of
fruit. Answer: B
Diff: 1
Topic: The Principle of Diminishing Returns
Skill: Analytical AACSB:
Analytic Skills Learning
Outcome: Micro-1
17) Refer to Table 2.4. The principle of diminishing returns sets in with the addition of the $\qquad$ tank of fertilizer.
A) 2nd B)

3rd C) 4th
D) 5 th

Answer: B

Diff: 2
Topic: The Principle of Diminishing Returns
Skill: Analytical AACSB:
Analytic Skills Learning
Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1

Recall the Application about the use of fertilizer and its impact on crop yields to answer the following question(s). The table is taken from this Application.

## Fertilizer and Corn Yield

| Bags of Fertilizer | Bushels of Corn |
| :---: | :---: |
| 0 | 85 |
| 1 | 120 |
| 2 | 135 |
| 3 | 144 |
| 4 | 147 |

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 Skills
Learning Outcome: Micro-1
20) Recall the Application. The table shows the resulting crop yields as bags of applied fertilizer increased. These results show that as more bags of fertilizer were 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 Skills
Learning Outcome: Micro-1
21) Recall the Application. Based on the data in the table, the principle of diminishing returns began to take effect on the $\qquad$ bag of fertilizer per acre.
A) 1st B)

2nd C) 3rd
D) 4 th

Answer: A

Diff: 2
Topic: Application 4, Fertilizer and Crop Yields
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-1
22) Recall the Application. Based on the data in the table, 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 Learning
Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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, lawn mowers, 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 Learning
Outcome: Micro-1
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 Learning
Outcome: Micro-1
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 $\qquad$ _.
Answer: diminishing returns
Diff: 1
Topic: The Principle of Diminishing Returns
Skill: Definition
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1

### 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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
3) The face value of money or income is called its $\qquad$ value.
A) real
B) marginal
C) nominal
D) external

Answer: C
Diff: 1
Topic: The Real-Nominal Principle
Skill: Definition
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
8) A major league baseball player signs a contract that pays $\$ 50$ million over five years. The $\$ 50$ million is the $\qquad$ value.
A) real
B) implicit
C) external
D) nominal

Answer: D
Diff: 1
Topic: The Real-Nominal Principle
Skill: Conceptual
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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) $\$ 0 \mathrm{~B}) \$ 1$
C) $\$ 3 \mathrm{D}) \$ 4$

Answer: C

Diff: 2
Topic: The Real-Nominal Principle
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-1
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) $\$ 0$ B) $\$ 3$
C) $\$ 6 \mathrm{D})$
\$106
Answer: C

Diff: 2
Topic: The Real-Nominal Principle
Skill: Analytical AACSB:
Analytic Skills Learning
Outcome: Micro-1
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) $\$ 0 \mathrm{~B})$
\$2 C) \$3
D) $\$ 6$

Answer: B

Diff: 2
Topic: The Real-Nominal Principle
Skill: Conceptual
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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) $\$ 5 \mathrm{~B})$
\$2.50 C)
\$2.00 D) \$0
Answer: A

Diff: 2
Topic: The Real-Nominal Principle
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-1
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
Learning Outcome: Micro-1
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) $0 \%$
B) $3 \%$
C) $6 \%$
D) $9 \%$

Answer: C
Diff: 2
Topic: The Real-Nominal Principle
Skill: Analytical
AACSB: Analytic Skills
Learning Outcome: Micro-1
15) Suppose that you lend $\$ 1,000$ to a friend and 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 Skills
Learning Outcome: Micro-1
16) You borrow money to buy a house in 2012 at a fixed interest rate of $6.5 \%$. By 2016, 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 Skills
Learning Outcome: Micro-1
17) You borrow money to buy a house in 2012 at a variable interest rate of $6.5 \%$. Your interest rate is always $2 \%$ more than the rate of inflation. By 2016, 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 Skills
Learning Outcome: Micro-1
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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
20) 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: The Value of the Minimum Wage
Skill: Conceptual
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
21) 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: The Value of the Minimum Wage
Skill: Conceptual
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
22) The weekly income earned in 2015 could buy $\qquad$ standard baskets of goods and services. A) 1.23
B) 1.70 C$)$
$2.22 \mathrm{D})$
2.81

Answer: A
Diff: 1
Topic: The Value of the Minimum Wage
Skill: Fact
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
23) The weekly income earned in 1974 could buy $\qquad$ standard baskets of goods and services. A) 1.23
B) 1.70 C )
$2.22 \mathrm{D})$
2.81

Answer: B
Diff: 1
Topic: The Value of the Minimum Wage
Skill: Fact
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
24) If the weekly income from 1974 to 2015 increased from $\$ 80$ to $\$ 290$, but the number of standard baskets of goods that the weekly income could purchase decreased from 1.70 to 1.23 from 1974 to 2015, then we can conclude that
A) prices decreased faster than the wage increase between 1974 and 2015.
B) prices increased faster than the wage increase between 1974 and 2015.
C) prices increased slower than the wage increase between 1974 and 2015.
D) prices decreased slower than the wage increase between 1974 and 2015.

Answer: B
Diff: 1
Topic: The Value of the Minimum Wage
Skill: Analytical AACSB:
Analytic Skills Learning
Outcome: Micro-1

## Recall the Application about the impact inflation has on your potential future salary and the repayment of student loans to answer the following question(s).

25) 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 Skills
Learning Outcome: Micro-1
26) 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 Skills
Learning Outcome: Micro-1
27) 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 Skills
Learning Outcome: Micro-1
28) 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 Skills
Learning Outcome: Micro-1
29) 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 Learning
Outcome: Micro-1
30) From 1974 to 2015, as the nominal minimum wage rose from $\$ 2$ to $\$ 7.25$, the real value of the minimum wage fell.
Answer: TRUE
Diff: 2
Topic: The Value of the Minimum Wage
Skill: Fact
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
33) People are interested in how much their money can buy. This is called the $\qquad$ .
Answer: real-nominal principle
Diff: 1
Topic: The Real-Nominal Principle
Skill: Definition
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
34) What does an increase in prices in retails 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 falls.
Diff: 1
Topic: The Real-Nominal Principle
Skill: Conceptual
AACSB: Reflective Thinking Skills
Learning Outcome: Micro-1
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 Skills
Learning Outcome: Micro-1
36) Suppose you earn $\$ 50,000$ per year in 2015. If your income increases by 8 percent while inflation increases by $10 \%$ in 2016, then calculate how much your real income has increased between 2015 and 2016.
Answer: Because inflation increased by 10 percent while nominal income increased only by 8 percent, then the real growth in income between 2015 and 2016 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 2015 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
Learning Outcome: Micro-1

