Principles of Microeconomics, 10e (Case/Fair/Oster)
Chapter 6 Household Behavior and Consumer Choice

6.1 Household Choice in Open Market

1 Multiple Choice

1) Jane has $500 a week to spend on clothing and food. The price of clothing is $25 and the price of food is $10. The clothing and food pairs in Jane's choice set include_____units of clothing and_____units of food.
   A) 50; 50
   B) 20; 50
   C) 15; 25
   D) 8; 30
   Answer: D
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

2) Jane has $500 a week to spend on clothing and food. The price of clothing is $25 and the price of food is $10. Jane spends her entire income when she purchases_____units of clothing and_____units of food.
   A) 10; 10
   B) 25; 5
   C) 12; 20
   D) 16; 8
   Answer: C
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

3) Jim has $600 a week to spend on clothing and food. The price of clothing is $30 and the price of food is $5. The clothing and food pairs in Jim's choice set include_____units of clothing and_____units of food.
   A) 20; 50
   B) 15; 70
   C) 10; 60
   D) 0; 200
   Answer: C
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

4) Jane has $500 a week to spend on clothing (*c*) and food (*f*). The price of clothing is $25 and the price of food is $10. What is the equation for Jane's budget constraint?
   A) Clothing + Food < $500
   B) $25 × Clothing + $10 × Food ≥ $500
   C) ($25 × Clothing) / ($10 × Food) = $500
   D) $25 × Clothing + $10 × Food = $500
   Answer: D
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

5) Ted has $600 a week to spend on clothing (*c*) and food (*f*). The price of clothing is $30 and the price of food is $5. What is the equation for Ted's budget constraint?
   A) Clothing + Food < $600
   B) $30 × Clothing + $5 × Food ≤ $600
   C) $30 × Clothing + $5 × Food > $600
   D) $30 × Clothing + $5 × Food = $600
   Answer: D
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

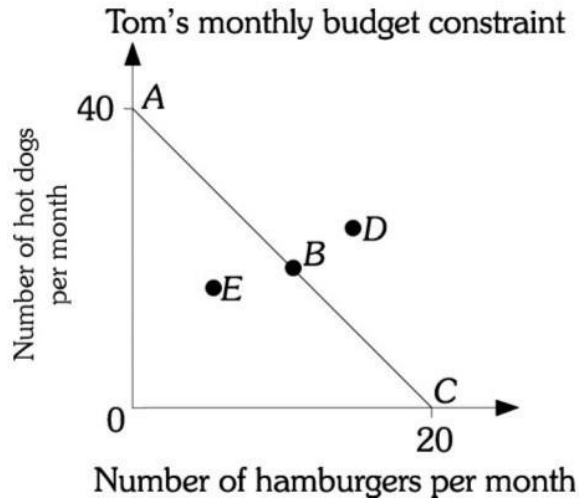*Refer to the information provided in Figure 6.1 below to answer the questions that follow.*

Figure 6.1

6) Refer to Figure 6.1. Assume Tom is on budget constraint *AC* and the price of a hamburger is $4.00. Tom's monthly income is
   A) $20.
   B) $60.
   C) $80.
   D) $100.
   Answer: C
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

7) Refer to Figure 6.1. Assume Tom is on budget constraint *AC* and the price of a hot dog is $2.00. Tom's monthly income is
   A) $40.
   B) $60.
   C) $80.
   D) $100.
   Answer: C
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

8) Refer to Figure 6.1. The slope of budget constraint AC is
   A) -5.0.
   B) -2.0.
   C) -0.5.
   D) indeterminate from this information because prices are not given.
   Answer: B
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

9) Refer to Figure 6.1. Assume Tom's budget constraint is AC. He does not spend his entire income at point
   A) A.
   B) B.
   C) D.
   D) E.
   Answer: D
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

10) Refer to Figure 6.1. Assume Tom's budget constraint is AC. Given his current monthly income he cannot purchase the bundle of goods at point
   A) A.
   B) B.
   C) E.
   D) D.
   Answer: D
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

11) Refer to Figure 6.1. Assume Tom's budget constraint is AC. At which point does Tom consume only hot dogs?
   A) A.
   B) B.
   C) E.
   D) D.
   Answer: A
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

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12) Refer to Figure 6.1. Along budget constraint *AC,* the opportunity cost of one hamburger
   A) is 1/4 of a hot dog.
   B) is 1/2 of a hot dog.
   C) is 2 hot dogs.
   D) changes as you move down along the budget constraint.
   Answer: C
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

13) Refer to Figure 6.1. Along budget constraint *AC,* the opportunity cost of one hot dog
   A) is 1/4 of a hamburger.
   B) is 1/2 of a hamburger.
   C) is 2 hamburgers.
   D) changes as you move down along the budget constraint.
   Answer: B
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

14) Refer to Figure 6.1. Tom's budget constraint is *AC.* His choice set includes all points
   A) to the right of budget constraint *AC.*
   B) bounded by the area *OAC.*
   C) along budget constraint *AC.*
   D) along the vertical and horizontal axes.
   Answer: B
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

15) Refer to Figure 6.1. *A*C represents Tom's budget constraint. Point *D* then represents a point that is
   A) an available option, as Tom is just spending all of his income.
   B) available, but at which he does not spend all his income.
   C) not available because it represents a combination of hamburgers and hot dogs that he cannot purchase with his income.
   D) in his opportunity set but not on his budget constraint.
   Answer: C
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

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Refer to the information provided in Figure 6.2 below to answer the questions that follow.
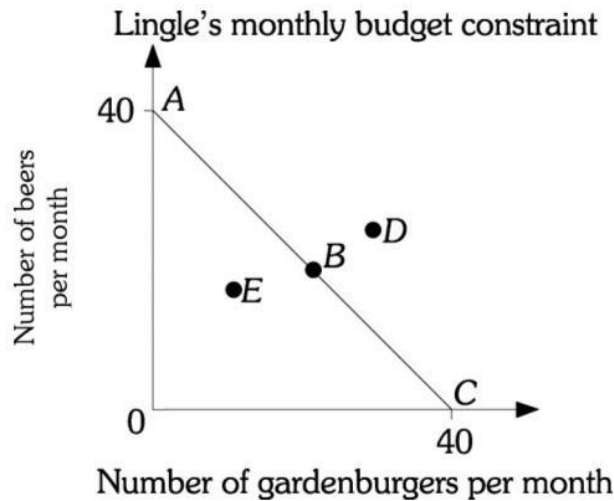

Figure 6.2

16) Refer to Figure 6.2. Assume Mr. Lingle is on budget constraint *AC*. If the price of a gardenburger is $6, Mr. Lingle's monthly income is
   A) $24.
   B) $60.
   C) $200.
   D) $240.
   Answer: D
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

17) Refer to Figure 6.2. Assume Mr. Lingle is on budget constraint *AC*. If the price of a beer is $5, Mr. Lingle's monthly income is
   A) $40.
   B) $80.
   C) $100.
   D) $200.
   Answer: D
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

18) Refer to Figure 6.2. The slope of budget constraint *A*C is
    A) -1/2.
    B) -1.
    C) -2.
    D) indeterminate from this information because prices are not given.
   Answer: B
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

19) Refer to Figure 6.2. Assume Mr. Lingle's budget constraint is *AC*. He will not spend his entire income at point
    A) A.
    B) *B.*
    C) *D.*
    D) *E.*
   Answer: D
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

20) Refer to Figure 6.2. Assume Mr. Lingle's budget is *AC*. Given his current monthly income he cannot purchase the quantities of the two goods at point
    A) A.
    B) *B.*
    C) *D.*
    D) *E.*
   Answer: C
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

21) Refer to Figure 6.2. Assume Mr. Lingle's budget is *AC*. At which point does Mr. Lingle spend exactly his income?
    A) A.
    B) *D.*
    C) *E.*
    D) The answer cannot be determined with the given information.
   Answer: A
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

22) Refer to Figure 6.2. Along budget constraint *AC*, the opportunity cost of one gardenburger is
    A) 1/4 of a beer.
    B) a beer.
    C) 2 beers.
    D) changing as Mr. Lingle moves down his budget constraint.
Answer: B
Diff: 2
Topic: Household Choices in Output Markets
Skill: Analytic

23) Refer to Figure 6.2. Along budget constraint *AC*, the opportunity cost of one beer is
    A) 1/4 of a gardenburger.
    B) 1 gardenburger.
    C) 2 gardenburgers.
    D) changing as Mr. Lingle moves down his budget constraint.
Answer: B
Diff: 2
Topic: Household Choices in Output Markets
Skill: Analytic

24) Refer to Figure 6.2. Mr. Lingle's budget constraint is *AC*. His choice set is all points
    A) in the area bounded by *OAC*.
    B) to the right of budget constraint *AC*.
    C) along budget constraint *AC*.
    D) along the vertical and horizontal axes.
Answer: A
Diff: 2
Topic: Household Choices in Output Markets
Skill: Analytic

25) Refer to Figure 6.2. Mr. Lingle's budget constraint is *AC*. Point *E* is
    A) an available option and Mr. Lingle exactly spends all of his income.
    B) an available option and Mr. Lingle does not spend all of his income.
    C) not in Mr. Lingle's opportunity set but is on his budget constraint.
    D) not available because it represents a combination of gardenburgers and beer that Mr.
       Lingle cannot purchase with his current income.
Answer: B
Diff: 3
Topic: Household Choices in Output Markets
Skill: Conceptual

26) Refer to Figure 6.2. Mr. Lingle's budget constraint is *AC*. Point *C* is
    A) an available option and Mr. Lingle exactly spends all of his income.
    B) an available option and Mr. Lingle does not spend all of his income.
    C) not in Mr. Lingle's opportunity set but is on his budget constraint.
    D) not available because it represents a combination of gardenburgers and beer that Mr. Lingle cannot purchase with his current income.
  Answer: A
  Diff: 3
  Topic: Household Choices in Output Markets
  Skill: Conceptual

Refer to the information provided in Figure 6.3 below to answer the questions that follow.
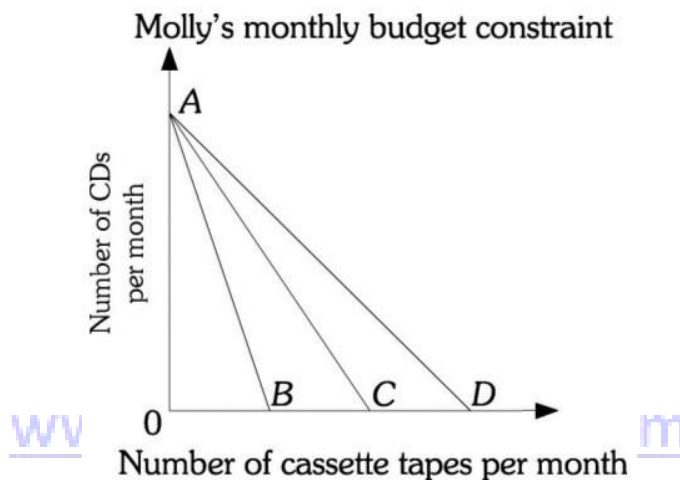

Figure 6.3

27) Refer to Figure 6.3. Molly's budget constraint is *AC*. It would swivel to *AD* if the price of
    A) cassette tapes increased.
    B) cassette tapes decreased.
    C) CDs increased.
    D) CDs decreased.
  Answer: B
  Diff: 2
  Topic: Household Choices in Output Markets
  Skill: Analytic

28) Refer to Figure 6.3. Molly's budget constraint is *AC*. It would swivel to *AB* if the price of
    A) cassette tapes increased.
    B) cassette tapes decreased.
    C) CDs increased.
    D) CDs decreased.
  Answer: A
  Diff: 2
  Topic: Household Choices in Output Markets
  Skill: Analytic

29) Refer to Figure 6.3. Molly's budget constraint is *AC*. Molly can purchase
   A) none of the points along AD.
   B) all of the points along AB.
   C) all of the points along BD.
   D) None of the above.
   Answer: B
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

Refer to the information provided in Figure 6.4 below to answer the questions that follow.
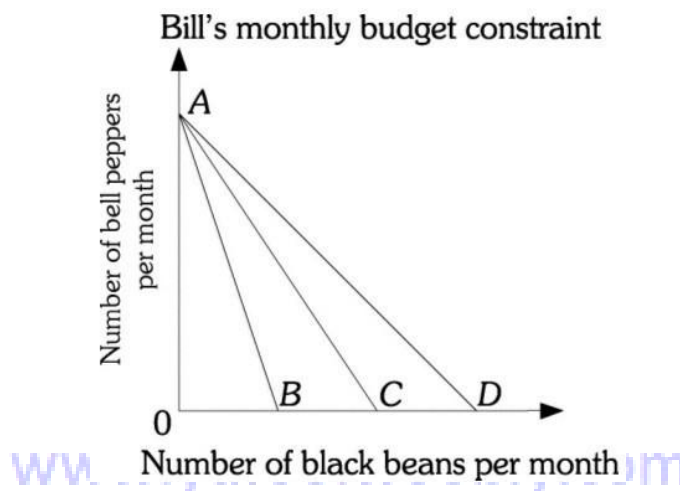

Figure 6.4

30) Refer to Figure 6.4. Bill's budget constraint is *AC*. If the black bean price decreases, Bill's budget constraint will be
   A) *AO*.
   B) *AB*.
   C) *AC*.
   D) *AD*.
   Answer: D
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

31) Refer to Figure 6.4. Bill's budget constraint is *AC*. If the bell peppers price increases, Bill's budget constraint will be
   A) *AB*.
   B) *AC*.
   C) *AD*.
   D) The budget constraint is not depicted on the diagram.
   Answer: D
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

32) Refer to Figure 6.4. Bill's budget constraint is *AC*. His budget constraint would shift to *AB* if the price of
   A) black beans increased.
   B) black beans decreased.
   C) bell peppers increased.
   D) bell peppers decreased.
   Answer: A
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Analytic

33) If a household's income doubles, its budget constraint will
   A) shift out parallel to the old one.
   B) pivot at the Y-intercept.
   C) shift in parallel to the old one.
   D) be unaffected.
   Answer: A
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Definition

34) If a household's income falls by 10%, its budget constraint will
   A) shift out parallel to the old one.
   B) pivot at the Y-intercept.
   C) shift in parallel to the old one.
   D) be unaffected.
   Answer: C
   Diff: 2
   Topic: Household Choices in Output Markets
   Skill: Definition

Refer to the information provided in Figure 6.5 below to answer the questions that follow.
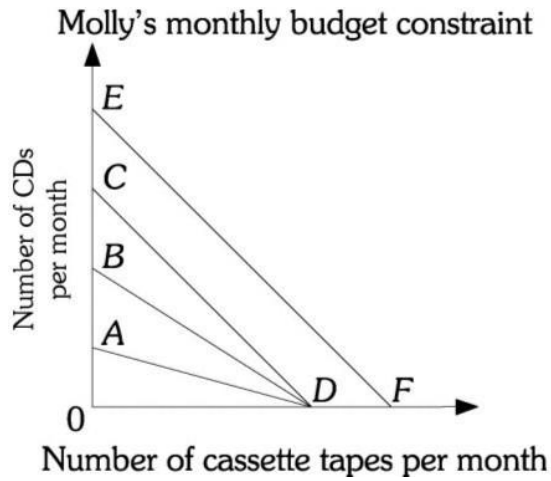

Figure 6.5

35) Refer to Figure 6.5. Molly's budget constraint is *BD*. If the price of CDs decreases, her new budget constraint becomes

   A) *AD*.

   B) *AO*.

   C) *CD*.

   D) *EF*.

Answer: C

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

36) Refer to Figure 6.5. Molly's budget constraint is *BD*. If the price of CDs increases, her new budget constraint becomes

   A) *AD*.

   B) *AO*.

   C) *CD*.

   D) *EF*.

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

37) Refer to Figure 6.5. Molly's budget constraint is *CD*. If her income increases, her new budget constraint is
   A) AD.
   B) *BD.*
   C) *EF.*
   D) not shown on this graph.
Answer: C
Diff: 2
Topic: Household Choices in Output Markets
Skill: Analytic

38) Refer to Figure 6.5. Molly's budget constraint is *EF*. If her income decreases while the price of the goods are unchanged, her new budget constraint is
   A) AD.
   B) *BD.*
   C) *CD.*
   D) not shown on this graph.
Answer: C
Diff: 2
Topic: Household Choices in Output Markets
Skill: Analytic

39) Refer to Figure 6.5. Molly's budget constraint is *EF*. If her income decreases and the price of CDs increases, her new budget constraint is
   A) CD.
   B) *BD.*
   C) *AD.*
   D) Both (B) or (C) are correct.
Answer: D
Diff: 3
Topic: Household Choices in Output Markets
Skill: Analytic

40) Refer to Figure 6.5. Molly's budget constraint is *BD*. Molly's income is $400, the price of a cassette tape is $15 and the price of a CD is $20. At point *B* the consumer is buying _____ cassette tapes and_____ CDs.
   A) 0;20
   B) 20;0
   C) 20; 15
   D) 40; 30
Answer: A
Diff: 2
Topic: Household Choices in Output Markets
Skill: Analytic

41) Refer to Figure 6.5. Molly's budget constraint is *BD*. Molly's income is $375, the price of a cassette tape is $15 and the price of a CD is $25. At point *D* the consumer is buying _____ cassette tapes and_____CDs.
   A) 0;15
   B) 25;0
   C) 25; 15
   D) 50; 30
Answer: B
Diff: 2
Topic: Household Choices in Output Markets
Skill: Analytic

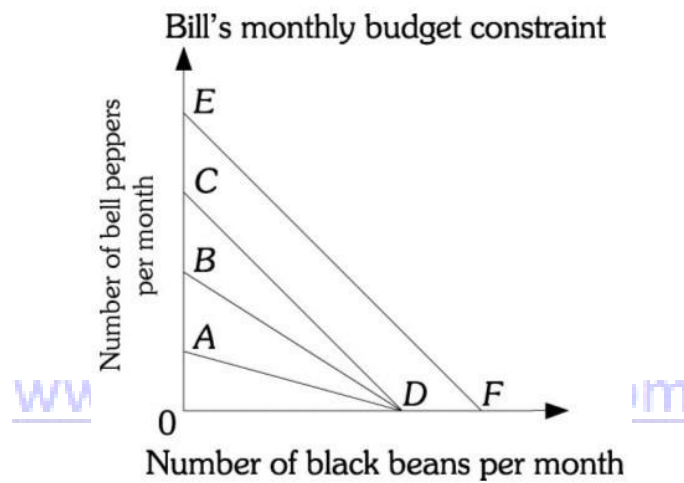*Refer to the information provided in Figure 6.6 below to answer the questions that follow.*

Figure 6.6

42) Refer to Figure 6.6. Bill's budget constraint was originally *CD*. If his new budget constraint is *EF*, then his income
   A) increased.
   B) decreased.
   C) did not change but the price of black beans decreased.
   D) did not change but the price of black beans increased.
Answer: A
Diff: 3
Topic: Household Choices in Output Markets
Skill: Conceptual

43) Refer to Figure 6.6. Bill's budget constraint was originally *AD*. If his new budget constraint is *EF*, then his income

   A) increased.

   B) decreased.

   C) increased and the price of bell peppers decreased.

   D) decreased and the price of bell peppers increased.

Answer: C

Diff: 3

Topic: Household Choices in Output Markets

Skill: Conceptual

44) Refer to Figure 6.6. Bill's budget constraint is *BD*. If the price of bell peppers increases, Bill's new budget constraint is

   A) *AD*.

   B) *AO*.

   C) *CD*.

   D) *EF*.

Answer: A

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

45) Refer to Figure 6.6. Bill's budget constraint is *BD*. Bill's income is $800, the price of a bell pepper is $1, and the price of a bag of black beans is $1. At point B Bill is buying _____ bell peppers and _____ bags of black beans.

   A) 0; 800

   B) 800; 0

   C) 400; 400

   D) 600; 200

Answer: B

Diff: 2

Topic: Household Choices in Output Markets

Skill: Analytic

46) Michael can buy either pizzas or submarine sandwiches. If the prices of pizza and submarine sandwiches double and so does Michael's money income, we can deduce that Michael's budget constraint will

   A) shift in but remain parallel to the old one.

   B) shift out but remain parallel to the old one.

   C) swivel in so that the slope of the budget constraint is doubled.

   D) remain unchanged.

Answer: D

Diff: 3

Topic: Household Choices in Output Markets

Skill: Conceptual

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47) Michael can buy either pizzas or submarine sandwiches. If the prices of pizza and submarine sandwiches double and Michael's money income triples, we can deduce that Michael's budget constraint will
   A) shift in but remain parallel to the old one.
   B) shift out but remain parallel to the old one.
   C) swivel in so that the slope of the budget constraint is doubled.
   D) remain unchanged.
 Answer: B
 Diff: 3
 Topic: Household Choices in Output Markets
 Skill: Conceptual

48) Price decreases will_____a household's choice set.
   A) increase
   B) decrease
   C) not change
   D) sometimes increase and other times decrease
 Answer: A
 Diff: 1
 Topic: Household Choices in Output Markets
 Skill: Fact

49) A car's real cost is its opportunity cost. Opportunity cost is determined by
   A) the price of the car.
   B) relative prices.
   C) wealth.
   D) the prices of the goods that are compliments to a car.
 Answer: B
 Diff: 3
 Topic: Household Choices in Output Markets
 Skill: Conceptual

Refer to the information provided in Figure 6.7 below to answer the questions that follow.
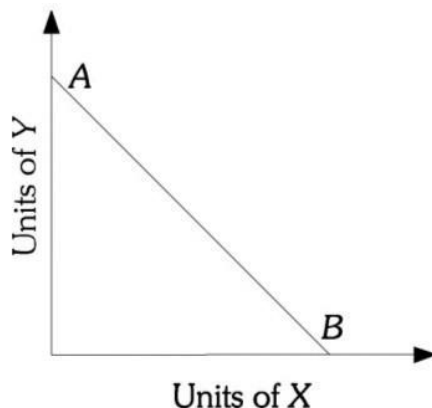

Figure 6.7

50) Refer to Figure 6.7. Along budget constraint *AB*, the price of good X is $10 and the price of good Y is $12. If the price of X increases to $15, the budget constraint will
A) pivot in at point *B*.
B) pivot out at point *A*.
C) shift in parallel to *AB*.
D) pivot in at point *A*.
Answer: A
Diff: 2
Topic: Household Choice in Input Markets
Skill: Analytic

2 True/False

1) When the price of a good increases, the budget constraint does not change.
Answer: FALSE
Diff: 1
Topic: Household Choices in Output Markets
Skill: Fact

2) When the price of a good decreases, the budget constraint shifts out parallel to the original budget constraint.
Answer: FALSE
Diff: 1
Topic: Household Choices in Output Markets
Skill: Fact

3) Assuming a perfectly competitive market implies that households have perfect knowledge of qualities and prices of everything available in the market.
Answer: TRUE
Diff: 1
Topic: Household Choices in Output Markets
Skill: Fact

4) Homogeneous products are distinguishable from each other.

Answer: FALSE
Diff: 2
Topic: Household Choices in Output Markets
Skill: Definition

5) Price increases cause a decrease in a household's choice set.
Answer: TRUE
Diff: 2
Topic: Household Choices in Output Markets
Skill: Fact

6) Income increases cause an increase in a household's choice set.
Answer: TRUE
Diff: 2
Topic: Household Choices in Output Markets
Skill: Fact

6.2 The Basis of Choice: Utility

1 Multiple Choice

1) Marginal utility is the_____satisfaction gained by consuming_____of a good.
   A) total; all units
   B) total; one more unit
   C) additional; all units
   D) additional; one more unit
   Answer: D
   Diff: 2
   Topic: The Basis of Choice: Utility
   Skill: Definition

2) Kathy eats five slices of pizza on a Saturday night but admits each slice of pizza doesn't taste as good as the previous one. This suggests that for Kathy the
   A) marginal utility of a slice of pizza is positive but decreasing.
   B) marginal utility of a slice of pizza is negative.
   C) total utility of slices of pizza is declining.
   D) total utility of slices of pizza is increasing by larger and larger increments.
   Answer: A
   Diff: 3
   Topic: The Basis of Choice: Utility
   Skill: Conceptual

Refer to the information provided in Figure 6.8 below to answer the questions that follow.
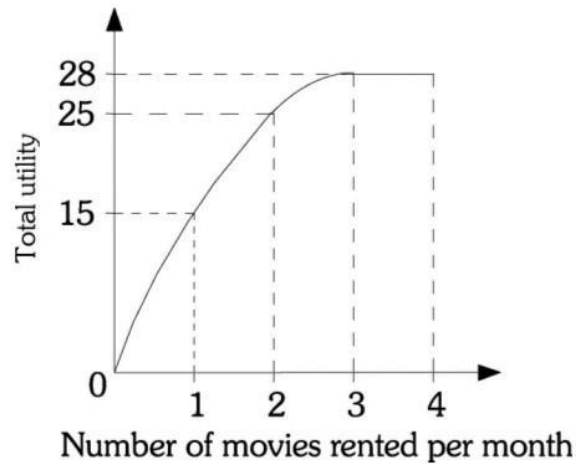

Figure 6.8

3) Refer to Figure 6.8. The marginal utility of the first movie rental is
   A) 0.
   B) 15.
   C) 25.
   D) 40.
   Answer: B
   Diff: 2
   Topic: The Basis of Choice: Utility
   Skill: Analytic

4) Refer to Figure 6.8. The marginal utility of the fourth movie rental is
   A) 0.
   B) 3.
   C) 25.
   D) 28.
   Answer: A
   Diff: 2
   Topic: The Basis of Choice: Utility
   Skill: Analytic

5) Refer to Figure 6.8. The _____ movie rental has a marginal utility of zero.
   A) first
   B) second
   C) third
   D) fourth
   Answer: D
   Diff: 2
   Topic: The Basis of Choice: Utility
   Skill: Analytic

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6) Refer to Figure 6.8. The total utility of the third movie is_____and its marginal utility is
   _____.
   A) 15; 0
   B) 25; 10
   C) 28; 3
   D) 28; 0
   Answer: C
   Diff: 2
   Topic: The Basis of Choice: Utility
   Skill: Analytic

7) The law of diminishing marginal utility is effective when marginal utility is
   A) positive and increasing.
   B) positive and decreasing.
   C) initially zero and then increasing.
   D) initially zero and then decreasing.
   Answer: B
   Diff: 3
   Topic: The Basis of Choice: Utility
   Skill: Analytic

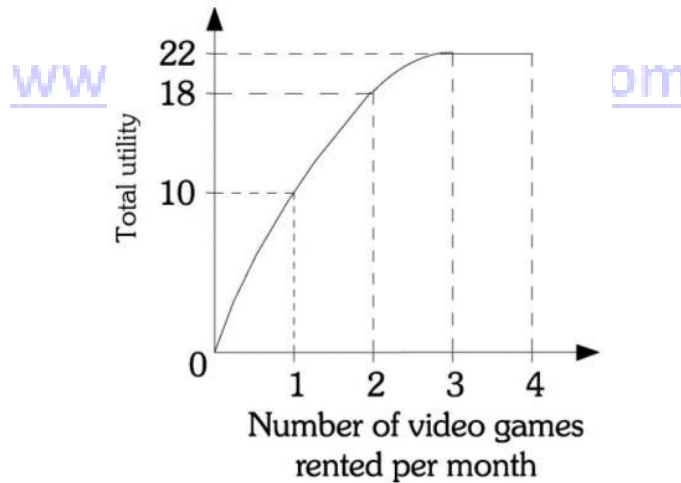*Refer to the information provided in Figure 6.9 below to answer the questions that follow.*

Figure 6.9

8) Refer to Figure 6.9. The marginal utility of the second video game rental is
   A) 8.
   B) 10.
   C) 25.
   D) 40.
   Answer: A
   Diff: 2
   Topic: The Basis of Choice: Utility
   Skill: Analytic

9) Refer to Figure 6.9. The marginal utility of the fourth video game rental is
   A) 0.
   B) 4.
   C) 8.
   D) 22.
   Answer: A
   Diff: 2
   Topic: The Basis of Choice: Utility
   Skill: Analytic

10) Refer to Figure 6.9. The_____video game rental has a marginal utility of zero.
   A) first
   B) second
   C) third
   D) fourth
   Answer: D
   Diff: 2
   Topic: The Basis of Choice: Utility
   Skill: Analytic

Refer to the information provided in Table 6.1 below to answer the questions that follow.

Table 6.1

Number of Hamburgers per Day	Total Utility	Marginal Utility
1	30	
2	52	
3	67	
4	76	
5		4

Number of Sodas per Day	Total Utility	Marginal Utility
1	20	
2	35	
3	47	
4	57	
5		7

11) Refer to Table 6.1. The marginal utility of the second hamburger per day is
   A) 10.
   B) 15.
   C) 22.
   D) 52.
   Answer: C
   Diff: 2
   Topic: The Basis of Choice: Utility
   Skill: Analytic

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12) Refer to Table 6.1. The marginal utility of the third hamburger per day is
    A) 5.
    B) 15.
    C) 22.
    D) 67.
Answer: B
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Analytic

13) Refer to Table 6.1. Diminishing marginal utility sets in after the_____soda per day.
    A) first
    B) second
    C) third
    D) fourth
Answer: A
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Analytic

14) Refer to Table 6.1. The total utility of five hamburgers per day is
    A) 76.
    B) 80.
    C) 96.
    D) indeterminate from this information.
Answer: B
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Analytic

15) Refer to Table 6.1. The total utility of five sodas per day is
    A) 35.
    B) 64.
    C) 92.
    D) indeterminate from this information.
Answer: B
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Analytic

16) Refer to Table 6.1. If the price of a soda is $2, the price of a hamburger is $6, and George has $14 of income, George's utility maximizing combination of sodas and hamburgers per day is
   A) 1 soda and 2 hamburgers.
   B) 4 sodas and 1 hamburger.
   C) 3 sodas and 1.5 hamburgers.
   D) indeterminate from this information.
   Answer: B
   Diff: 3
   Topic: The Basis of Choice: Utility
   Skill: Analytic

17) Refer to Table 6.1. Assume that a store is giving hamburgers and sodas away for free. Consumers can have as many sodas and hamburgers as they want, but the food has to be consumed one unit at a time. If George has already had one soda and two hamburgers, then George should
   A) next consume a soda to maximize his utility.
   B) next consume a hamburger to maximize his utility.
   C) be indifferent between consuming the second soda or the third hamburger.
   D) consume neither another soda nor another hamburger to maximize his utility.
   Answer: C
   Diff: 3
   Topic: The Basis of Choice: Utility
   Skill: Conceptual

Refer to the information provided in Table 6.2 below to answer the questions that follow.

Table 6.2

Number of Candy Bars per Day	Total Utility	Marginal Utility
1	40	
2	75	
3	100	
4	115	
5		5

Number of Hot Dogs per Day	Total Utility	Marginal Utility
1	30	
2	54	
3	72	
4	84	
5		6

18) Refer to Table 6.2. The marginal utility of the second candy bar per day is
    A) 10.
    B) 15.
    C) 35.
    D) 55.
Answer: C
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Analytic

19) Refer to Table 6.2. Diminishing marginal utility sets in after the_____candy bar per day.
    A) first
    B) second
    C) third
    D) fourth
Answer: A
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Analytic

20) Refer to Table 6.2. The total utility of five candy bars per day is
    A) 115.
    B) 120.
    C) 130.
    D) indeterminate from this information.
Answer: B
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Analytic

21) Refer to Table 6.2. If the price of a candy bar is $1, the price of a hot dog is $2, and Aaron has $6 of income, Aaron's utility maximizing combination of sodas and hamburgers per day is
   A) 1 candy bar and 2 hot dogs.
   B) 4 candy bars and 1 hot dog.
   C) 2 candy bars and 1.5 hot dogs.
   D) indeterminate from this information.
Answer: B
Diff: 3
Topic: The Basis of Choice: Utility
Skill: Analytic

22) Richard is consuming X and Y so that he is spending his entire income and $MU_x/P_x = 6$ and $MU_y/P_y = 10$. To maximize utility, he should
   A) continue to consume the same amount of X and Y since he is already maximizing utility.
   B) consume less of both X and Y.
   C) consume more X and less Y.
   D) consume less X and more Y.
Answer: D
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Analytic

23) Jon is consuming X and Y so that he is spending his entire income and $MU_x/P_x = 8$ and $MU_y/P_y = 4$. To maximize utility, he should consume
   A) the same amount of X and Y since he is already maximizing utility.
   B) less of both X and Y.
   C) more X and less Y.
   D) less X and more Y.
Answer: C
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Analytic

24) Jon is consuming X and Y so that he is spending his entire income and $MU_x/P_x = 4$ and $MU_y/P_y = 4$. To maximize utility, he should consume
   A) the same amount of X and Y since he is already maximizing utility.
   B) less of both X and Y.
   C) more X and less Y.
   D) less X and more Y.
Answer: A
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Analytic

25) If $MU_x/P_x < MU_y/P_y$, then
   A) spending a dollar less on Y and a dollar more on X increases utility.
   B) spending a dollar less on X and a dollar more on Y increases utility.
   C) X is more expensive than Y.
   D) Y is more expensive than X.
   Answer: B
   Diff: 2
   Topic: The Basis of Choice: Utility
   Skill: Definition

26) Sue is maximizing her utility. Her MU_x/P_x=10 and MU_y=40. Then the price of Y must be
   A) $1.
   B) $4.
   C) $10.
   D) $40.
   Answer: B
   Diff: 2
   Topic: The Basis of Choice: Utility
   Skill: Conceptual

27) Ellen is spending her entire income on goods X and Y. Her marginal utility from the last units of X and Y that she consumes is 25. Ellen's utility is only maximized if
   A) the prices of X and Y are the same.
   B) the price of good X is twice that of good Y.
   C) the price of good Y is twice that of good X.
   D) We cannot determine whether Ellen is maximizing her utility.
   Answer: A
   Diff: 2
   Topic: The Basis of Choice: Utility
   Skill: Conceptual

28) Ellie is spending her entire income on goods X and Y. Her marginal utility from the last unit of X is 100 and the marginal utility from the last unit of Y that she consumes is 50. Ellie's utility is only maximized if
   A) the prices of X and Y are the same.
   B) the price of good X is twice that of good Y.
   C) the price of good Y is twice that of good X.
   D) We cannot determine whether Ellie is maximizing her utility.
   Answer: B
   Diff: 2
   Topic: The Basis of Choice: Utility
   Skill: Conceptual

Refer to the information provided in Figure 6.10 below to answer the questions that follow.
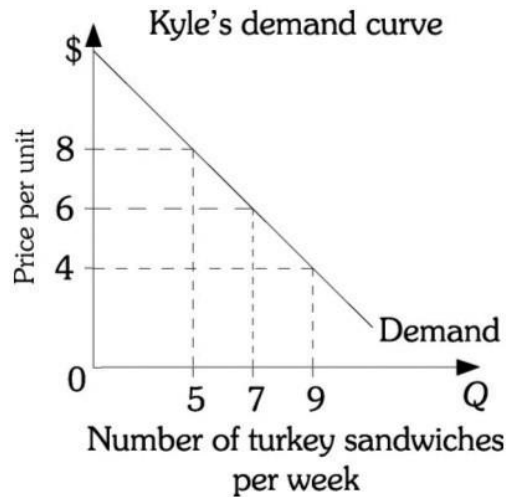

Figure 6.10

29) Refer to Figure 6.10. The current price of a turkey sandwich is $6. If Kyle is currently buying five turkey sandwiches a week, he_____maximizing utility because the marginal utility _____ than its price.
   A) is; from the fifth sandwich is greater
   B) is; from the fifth sandwich is less
   C) is not; gained from the fifth sandwich is less
   D) is not; gained from the fifth sandwich is greater
Answer: D
Diff: 3
Topic: The Basis of Choice: Utility
Skill: Conceptual

30) Refer to Figure 6.10. The current price of a turkey sandwich is $6. If Kyle is currently buying nine turkey sandwiches a week, he_____maximizing utility because the marginal utility _____ than its price.
   A) is; from the ninth sandwich is greater
   B) is; from the ninth sandwich is less
   C) is not; gained from the ninth sandwich is less
   D) is not; gained from the ninth sandwich is greater
Answer: C
Diff: 3
Topic: The Basis of Choice: Utility
Skill: Conceptual

31) Refer to Figure 6.10. Kyle would increase his consumption of turkey sandwiches from 7 to 9 per week if their price fell from $6 to $4. This illustrates the idea of
    A) consumer surplus.
    B) the law of diminishing marginal utility.
    C) cross-price elasticity of demand.
    D) technical efficiency.
Answer: B
Diff: 3
Topic: The Basis of Choice: Utility
Skill: Conceptual

32) The marginal utility of the first cup of coffee that Tom drinks in the morning is worth $2.00. The marginal utility of the 9th cup of coffee he drinks is positive while the marginal utility of the 10th cup of coffee he drinks in the morning is worth $0. This implies that at a price of $0, Tom would drink
    A) zero cups of coffee per morning.
    B) at most 10 cups of coffee per morning.
    C) more than 10 cups of coffee per morning, but the actual number is indeterminate from this information.
    D) an infinite number of cups of coffee each morning.
Answer: B
Diff: 3
Topic: The Basis of Choice: Utility
Skill: Conceptual

33) For Matthew, the marginal utility of the 9th soda in a day is positive and the marginal utility of the 10th soda in a day is zero. This
    A) implies that Matthew's demand curve for sodas per day will become upward sloping at 10 sodas per day.
    B) is impossible because each additional unit of consumption of any good must provide positive marginal utility.
    C) implies that at a zero price Matthew's demand curve will intersect the quantity axis at 10.
    D) implies that Matthew maximizes utility by consuming 9 sodas per day.
Answer: C
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Definition

34) Total utility is
    A) the total amount of satisfaction yielded by the consumption of a good or service.
    B) the additional satisfaction gained by consuming one more unit of something.
    C) used to compare different people's likes and dislikes.
    D) relatively easy to measure.
Answer: A
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Definition

35) The law of diminishing marginal utility refers to
    A) a consumer's decrease in total satisfaction as she consumes more units of a good.
    B) a consumer's decrease in additional satisfaction as she consumes more and more units of a good.
    C) the idea that total utility is negative.
    D) the idea that marginal utility is negative.
Answer: B
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Definition

36) We can state the utility-maximizing rule in words in the following way: A person maximizes utility when she equalizes the _____ across products.
    A) total utility
    B) total utility per dollar spent
    C) marginal utility
    D) marginal utility per dollar spent
Answer: D
Diff: 3
Topic: The Basis of Choice: Utility
Skill: Conceptual

37) A utility-maximizing consumer buys so as to make _____ for all pairs of goods.
    A) $P_x(MU_x) = P_y(MU_v)$
    B) $TU_x/P_x = TU_y/P_y$
    C) $MU_x/MU_y = P_x/P_y$
    D) $MU_x = MU_y$
Answer: C
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Analytic

38) The ratio of the marginal utility of coffee to the marginal utility of donuts is four for an individual maximizing utility. This implies that
    A) a donut is four times more valuable than a cup of coffee.
    B) the coffee to donuts price ratio is one to four.
    C) the coffee to donuts price ratio is four to one.
    D) this person always eats donuts with coffee.
Answer: C
Diff: 3
Topic: The Basis of Choice: Utility
Skill: Conceptual

39) Kathleen likes avocado and crab dip. After eating avocado and crab dip with four crackers, she switches to cheese with crackers. We can conclude that
    A) the avocado and crab dip cannot have tasted that good.
    B) the avocado and crab dip with crackers now has a marginal utility of zero.
    C) at this point cheese and crackers have a higher marginal utility per dollar spent than that of avocado and crab dip with crackers.
    D) Kathleen is no longer maximizing her utility.
Answer: C
Diff: 3
Topic: The Basis of Choice: Utility
Skill: Conceptual

40) The law of diminishing marginal utility implies that
    A) demand curves always slope downward and to the right.
    B) supply curves always slope upward and to the right.
    C) a consumer will always buy positive amounts of all goods.
    D) total utility will always increase by an increasing amount as consumption increases.
Answer: A
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Definition

41) The diamond/water paradox states that things with the _____ value in use frequently have _____ value in exchange.
    A) least; the least
    B) least; little or no
    C) greatest; little or no
    D) greatest; the greatest
Answer: C
Diff: 1
Topic: The Basis of Choice: Utility
Skill: Definition

2 True/False

1) The law of diminishing marginal utility implies that as a household consumes more of a product, its total utility will increase by smaller amounts -assuming marginal utility remains positive.
Answer: TRUE
Diff: 1
Topic: The Basis of Choice: Utility
Skill: Fact

2) The law of diminishing marginal utility implies that total utility never reaches a maximum.
Answer: FALSE
Diff: 1
Topic: The Basis of Choice: Utility
Skill: Fact

3) When consumers maximize utility, they are equating the ratio of marginal utility to price across all goods consumed.
Answer: TRUE
Diff: 1
Topic: The Basis of Choice: Utility
Skill: Fact

4) A negative marginal utility implies negative total utility.
Answer: FALSE
Diff: 1
Topic: The Basis of Choice: Utility
Skill: Fact

5) If MU_x/P_x exceeds MU_y/P_y, then a household can increase its utility by spending more on X and less on Y.
Answer: TRUE
Diff: 1
Topic: The Basis of Choice: Utility
Skill: Fact

6) Assuming well-defined indifference curves, when marginal utility is zero, total utility is at a minimum.
Answer: FALSE
Diff: 2
Topic: The Basis of Choice: Utility
Skill: Fact

7) The diamond/water paradox helps to illustrate the concept of marginal value.
Answer: TRUE
Diff: 1
Topic: The Basis of Choice: Utility
Skill: Fact

6.3 Income and Substitution Effects

1 Multiple Choice

1) A rise in the price of Pepsi that causes a household to shift its purchasing pattern toward Coke and away from Pepsi is the _____ effect of a price change.
   A) income
   B) substitution
   C) complementary
   D) diminishing marginal utility
Answer: B
Diff: 1
Topic: Income and Substitution Effects
Skill: Fact

2) For normal goods, the substitution and income effects of a price decrease will
   A) both decrease the quantity of the good demanded.
   B) both increase the quantity of the good demanded.
   C) the substitution effect will increase the quantity of the good demanded while the income effect will decrease the quantity of the good demanded.
   D) the substitution effect will decrease the quantity of the good demanded while the income effect will increase the quantity of the good demanded.

Answer: B
Diff: 2
Topic: Income and Substitution Effects
Skill: Definition

3) For inferior goods, the substitution and income effects of a price increase will
   A) both decrease the quantity of the good demanded.
   B) both increase the quantity of the good demanded.
   C) the substitution effect will increase the quantity of the good demanded while the income effect will decrease the quantity of the good demanded.
   D) the substitution effect will decrease the quantity of the good demanded while the income effect will increase the quantity of the good demanded.

Answer: D
Diff: 2
Topic: Income and Substitution Effects
Skill: Definition

4) A price change would have the largest income effect on a
   A) magazine.
   B) desktop computer.
   C) piece of clothing.
   D) car.

Answer: D
Diff: 3
Topic: Income and Substitution Effects
Skill: Conceptual

5) Assuming that charitable giving is a normal good, the income effect of a decrease in personal tax rates would lead to
   A) less giving because giving to charity would become more expensive relative to other goods.
   B) more giving because giving to charity would become less expensive relative to other goods.
   C) more giving because households would have more disposable income.
   D) less giving because households would spend that money on luxury goods.

Answer: C
Diff: 3
Topic: Income and Substitution Effects
Skill: Conceptual

6) Related to the *Economics in Practice* on p.118 : Suppose Store ABC runs an ad claiming to have "low prices everyday". They even demonstrate that the total expenditure for a basket of groceries is less at their store than at any of their competitors. Which of the following statements is NOT true?
   A) You would clearly be better off shopping at Store ABC.
   B) Your preferences may not be consistent with the basket used by Store ABC (in their example), thus it is not clear whether or not you would be better off shopping at Store ABC or not.
   C) Even if your preferences are generally consistent with the basket used by Store ABC, it may still be possible for you to substitute other similar goods for those in the basket used by Store ABC (in their example) and thus spend less at another store.
   D) All of the above statements are true.
Answer: A
Diff: 2
Topic: Household Choice in Input Markets: Economics in Practice
Skill: Conceptual

2 True/False

1) Ignoring income effects, an increase in the wage rate will cause an increase in labor supply.
Answer: TRUE
Diff: 1
Topic: Income and Substitution Effects
Skill: Fact

6.4 Household Choice in Input Markets

1 Multiple Choice

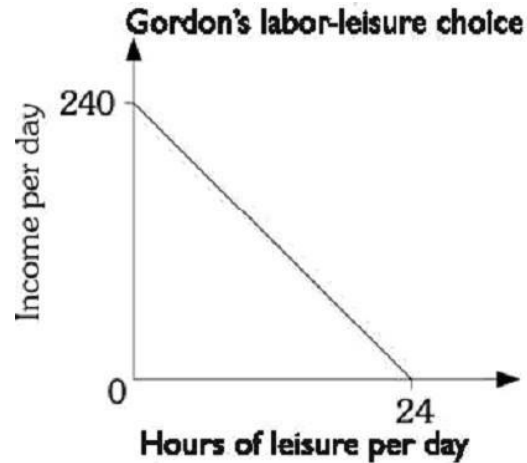*Refer to the information provided in Figure 6.11 below to answer the question that follows.*

Figure 6.11

1) Refer to Figure 6.11. Gordon's opportunity cost of one hour of leisure is
    A) $10.
    B) $24.
    C) $240.
    D) indeterminate from this information.
   Answer: A
   Diff: 2
   Topic: Household Choice in Input Markets
   Skill: Analytic

2) Assume leisure is a normal good. The substitution effect of a wage decrease implies a
   _____ demand for leisure and a _____ labor supply.
    A) lower; higher
    B) higher; lower
    C) higher; higher
    D) lower; lower
   Answer: B
   Diff: 3
   Topic: Household Choice in Input Markets
   Skill: Conceptual

3) If the substitution effect of a wage change outweighs the income effect of a wage change, the labor-supply curve is
   A) upward sloping.
   B) horizontal.
   C) vertical.
   D) backward bending.
   Answer: A
   Diff: 3
   Topic: Household Choice in Input Markets
   Skill: Conceptual

4) Assume leisure is an inferior good instead of a normal good. The income effect of a wage increase will lead to a_____demand for leisure and a_____labor supply.
   A) higher; higher
   B) higher; lower
   C) lower; higher
   D) lower; lower
   Answer: C
   Diff: 3
   Topic: Household Choice in Input Markets
   Skill: Conceptual

5) Assuming that leisure is a normal good, if an individual's labor supply curve is backward bending, then the
   A) income effect outweighs the substitution effect at higher wages.
   B) substitution effect outweighs the income effect at higher wages.
   C) income effect and the substitution effects are equal.
   D) income effect is zero.
   Answer: A
   Diff: 2
   Topic: Household Choice in Input Markets
   Skill: Fact

6) Related to the *Economics in Practice* on p. 121: By offering a broad range of high quality services for employees on-site, Google has
   A) made going to work less attractive to its employees.
   B) decreased the marginal utility of work to its employees.
   C) decreased the marginal utility of leisure to its employees.
   D) had no impact on the labor-leisure choice of its employees.
   Answer: A
   Diff: 1
   Topic: Household Choice in Input Markets: Economics in Practice
   Skill: Fact

6.5 Appendix

1 Multiple Choice

1) Harry tells you that he prefers Pepsi to Coke, Coke to 7-UP, and 7-UP to Pepsi. This violates what assumption made when analyzing consumer preferences?
   A) That more is better.
   B) That there is a diminishing marginal rate of substitution.
   C) That consumers are rational.
   D) That consumers are able to choose among all the combinations of goods and services available.
   Answer: C
   Diff: 3
   Topic: Appendix: Indifference Curves
   Skill: Conceptual

2) A consumer satisfies the condition_____when her indifference curve is just tangent to her budget constraint.
   A) $MU_x = MU_y$
   B) $TU_x = TU_y$
   C) $MU_x/P_x = MU_y/P_y$
   D) $TU_x/P_x = TU_y/P_y$
   Answer: C
   Diff: 1
   Topic: Appendix: Indifference Curves
   Skill: Fact

3) Assume Sally is initially in equilibrium and that X and Y are normal goods for her. Then the price of X rises. For Sally to move to a new equilibrium point her consumption of
   A) X must remain constant, but her consumption of Y must increase.
   B) X must decrease.
   C) X must increase.
   D) both X and Y must increase.
   Answer: B
   Diff: 2
   Topic: Appendix: Indifference Curves
   Skill: Analytic

4) An assumption underlying indifference curve analysis is that MU_x/MU_y_____as more of X and less of Y is consumed.
   A) increases
   B) decreases
   C) remains constant
   D) always equals one
   Answer: B
   Diff: 2
   Topic: Appendix: Indifference Curves
   Skill: Analytic

Refer to the information provided in Figure 6.13 below to answer the question that follows.
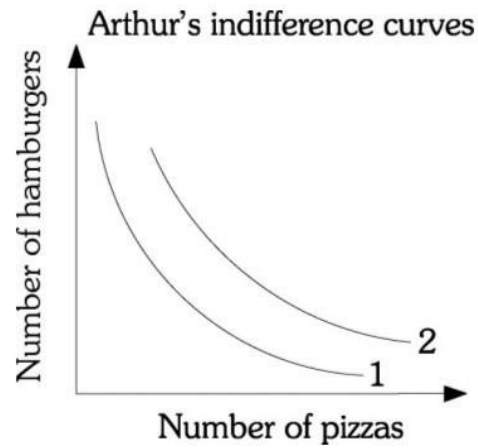

Figure 6.13

5) Refer to Figure 6.13. If Arthur moves from indifference curve 1 to indifference curve 2, then Arthur's
   A) marginal utility increases.
   B) total utility increases.
   C) total income decreases.
   D) prices of the goods increase.

Answer: B
Diff: 2
Topic: Appendix: Indifference Curves
Skill: Definition

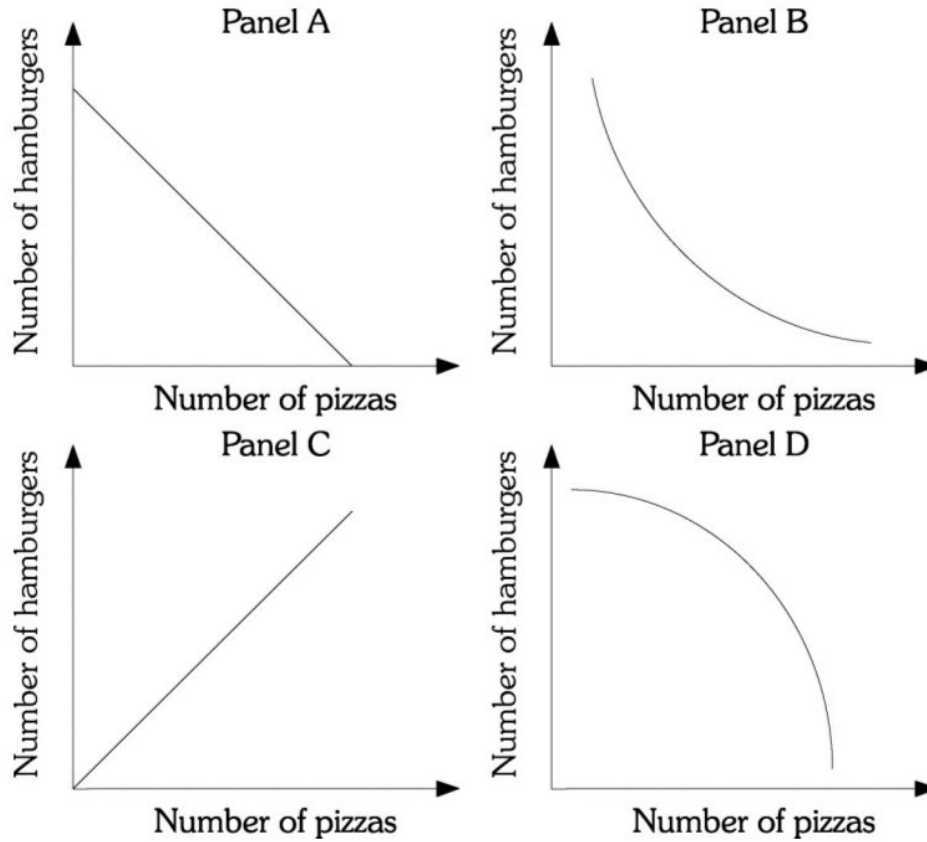*Refer to the information provided in Figure 6.14 below to answer the questions that follow.*

Figure 6.14

6) Refer to Figure 6.14. Assume Ellen has two products available, pizza and hamburgers. Ellen is always willing to trade one pizza for one hamburger regardless of how many pizzas and hamburgers she has. The curve in Panel_____represents her indifference curve.

  A) A
  B) B
  C) C
  D) D
Answer: A
Diff: 3
Topic: Appendix: Indifference Curves
Skill: Conceptual

7) Refer to Figure 6.14. Assume Ellen has two products available, pizza and hamburgers. Ellen must be compensated with more pizzas as she gives up more burgers. The curve in Panel _____ represents her indifference curve.
   A) A
   B) B
   C) C
   D) D
Answer: B
Diff: 3
Topic: Appendix: Indifference Curves
Skill: Conceptual

8) As you move up an indifference curve, the absolute value of the slope
   A) increases.
   B) decreases.
   C) remains constant.
   D) initially increases and then decreases.
Answer: A
Diff: 1
Topic: Appendix: Indifference Curves
Skill: Fact

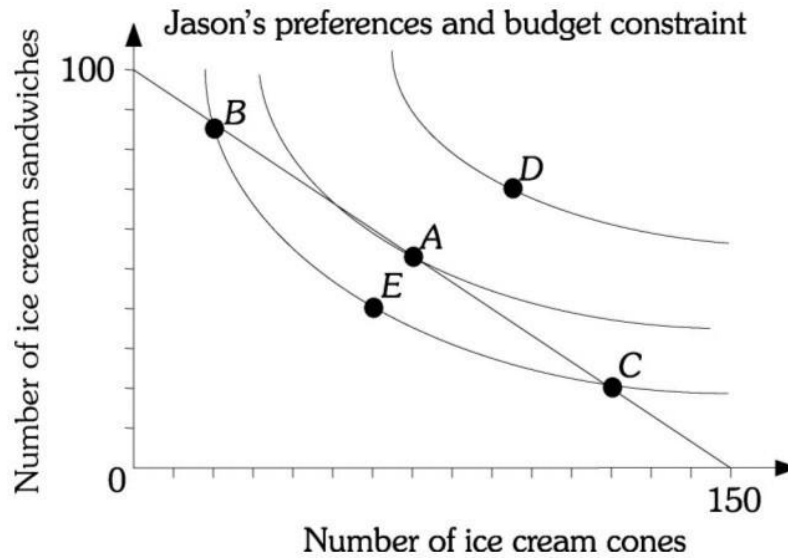*Refer to the information provided in Figure 6.15 below to answer the questions that follow.*

Figure 6.15

9) Refer to Figure 6.15. If the price of an ice cream cone is $2, Jason's income is
   A) $75.
   B) $250.
   C) $300.
   D) indeterminate because the price of ice cream sandwiches is not given.
   Answer: C
   Diff: 2
   Topic: Appendix: Indifference Curves
   Skill: Analytic

10) Refer to Figure 6.15. Jason maximizes utility at point
   A) *A*.
   B) *B*.
   C) *C*.
   D) *D*.
   Answer: A
   Diff: 2
   Topic: Appendix: Indifference Curves
   Skill: Analytic

11) Refer to Figure 6.15. The slope of the indifference curve is the ratio of the
  A) marginal utility of ice cream cones to the marginal utility of ice cream sandwiches.
  B) marginal utility of ice cream sandwiches to the marginal utility of ice cream cones.
  C) total utility of ice cream cones to the total utility of ice cream sandwiches.
  D) total utility of ice cream sandwiches to the total utility of ice cream cones.
Answer: A
Diff: 2
Topic: Appendix: Indifference Curves
Skill: Definition

12) Refer to Figure 6.15. At point *A*, the slope of the indifference curve is
  A) -0.67.
  B) -1.5.
  C) -3.0.
  D) indeterminate because the marginal utilities are unknown.
Answer: A
Diff: 2
Topic: Appendix: Indifference Curves
Skill: Analytic

13) Refer to Figure 6.15. If the price of an ice cream cone is $2, the price of ice cream sandwiches is
  A) $2.
  B) $3.
  C) $50.
  D) $100.
Answer: B
Diff: 2
Topic: Appendix: Indifference Curves
Skill: Analytic

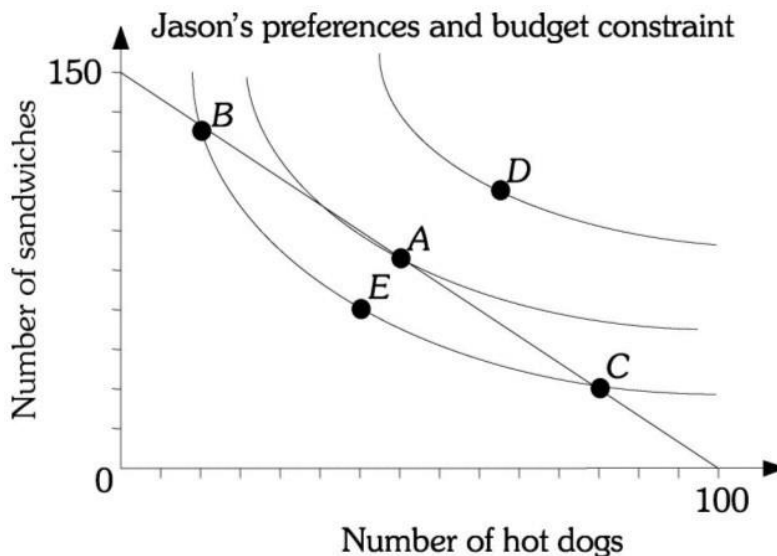*Refer to the information provided in Figure 6.16 below to answer the question that follows.*

Figure 6.16

14) Refer to Figure 6.16. If the price of a hot dog is $2, Jason's income is
   A) $25.
   B) $200.
   C) $300.
   D) indeterminate because the price of sandwiches is not given.
Answer: B
Diff: 2
Topic: Appendix: Indifference Curves
Skill: Analytic

15) Refer to Figure 6.16. Why was Jason NOT maximizing his utility at point C?
   A) He is not spending his entire budget.
   B) His marginal utility per dollar spent on the last sandwich is greater than his marginal
      utility per dollar spent on his last hot dog.
   C) His marginal utility per dollar spent on the last sandwich is less than his marginal
      utility per dollar spent on his last hot dog.
   D) He is maximizing his utility at point C.
Answer: B
Diff: 3
Topic: Appendix: Indifference Curves
Skill: Conceptual

16) Refer to Figure 6.16. The highest indifference curve depicted is the one on which point D lies. Why is Jason NOT maximizing his utility at point D?
   A) He cannot afford point D.
   B) His marginal utility per dollar spent on the last sandwich is greater than his marginal utility per dollar spent on his last hot dog.
   C) His marginal utility per dollar spent on the last sandwich is less than his marginal utility per dollar spent on his last hot dog.
   D) He is maximizing his utility at point C.
   Answer: A
   Diff: 2
   Topic: Appendix: Indifference Curves
   Skill: Conceptual

17) We derive the demand curve for X from indifference curves and a budget constraint by changing the
   A) level of income.
   B) price of *X*.
   C) price of *Y*.
   D) consumers' preferences.
   Answer: B
   Diff: 3
   Topic: Appendix: Indifference Curves
   Skill: Conceptual

2 True/False

1) Assuming the properties of normal indifference curves, a consumer will maximize his utility where his indifference curve is just tangent to his budget constraint.
   Answer: TRUE
   Diff: 1
   Topic: Appendix: Indifference Curves
   Skill: Fact