Chapter 2  Trade-offs, Comparative Advantage, and the Market System

2.1 Production Possibilities Frontiers and Opportunity Costs

1. Scarcity
   A) stems from the incompatibility between limited resources and unlimited wants.
   B) can be overcome by discovering new resources.
   C) can be eliminated by rationing products.
   D) is a bigger problem in market economies than in socialist economies.
   Answer:  A
   Diff: 2   Type: MC   Page Ref: 38/38
   Topic: Production Possibilities Frontier and Opportunity Costs
   Skill: Conceptual
   Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs
   AACSB Coding: Reflective Thinking
   Special Feature: None

2. In 2002, BMW made a tactical decision to use a robot to attach the gearbox to the engines of its vehicles instead of using two workers as it had done previously. The robot method had a higher cost but installed the gearbox in exactly the right position. In making this decision, BMW
   A) faced no tradeoffs because the robot method increased efficiency.
   B) faced a tradeoff between higher cost and lower precision (in installing the gearbox in exactly the right position)
   C) adopted a negative technological change because it replaced workers with robots.
   D) eroded some of its competitiveness in the luxury car market because of its increased cost of production.
   Answer:  B
   Diff: 2   Type: MC   Page Ref: 36/36
   Topic: Production Possibilities Frontier and Opportunity Costs
   Skill: Analytical
   Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs
   AACSB Coding: Analytic Skills
   Special Feature: Chapter Opener: Managers Making Choices at BMW
3. The principle of opportunity cost is that
   A) in a market economy, taking advantage of profitable opportunities involves some money cost.
   B) the economic cost of using a factor of production is the alternative use of that factor that is given up.
   C) taking advantage of investment opportunities involves costs.
   D) the cost of production varies depending on the opportunity for technological application.

   Answer: B
   Diff: 2   Type: MC   Page Ref: 38/38
   Topic: Production Possibilities Frontier and Opportunity Costs
   Skill: Conceptual
   Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs
   AACSB Coding: Reflective Thinking
   Special Feature: None

4. The production possibilities frontier shows
   A) the various products that can be produced now and in the future.
   B) the maximum attainable combinations of two products that may be produced in a particular time period with available resources.
   C) what an equitable distribution of products among citizens would be.
   D) what people want firms to produce in a particular time period.

   Answer: B
   Diff: 2   Type: MC   Page Ref: 38/38
   Topic: Production Possibilities Frontier and Opportunity Costs
   Skill: Conceptual
   Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs
   AACSB Coding: Reflective Thinking
   Special Feature: None

5. The production possibilities frontier model shows that
   A) if consumers decide to buy more of a product its price will increase.
   B) a market economy is more efficient in producing goods and services than is a centrally planned economy.
   C) economic growth can only be achieved by free market economies.
D) if all resources are fully and efficiently utilized, more of one good can be produced only by producing less of another good.

Answer: D

6. The production possibilities frontier model assumes all of the following except
   A) labor, capital, land and natural resources are fixed in quantity.
   B) the economy produces only two products.
   C) any level of the two products that the economy produces is currently possible.
   D) the level of technology is fixed and unchanging.

Answer: C

7. The attainable production points on a production possibility curve are A) the horizontal and vertical intercepts.
   B) the points along the production possibilities frontier.
   C) the points outside the area enclosed by the production possibilities frontier.
   D) the points along and inside the production possibility frontier.

Answer: D

8. The unattainable points in a production possibilities diagram are A) the points within the production possibilities frontier.
   B) the points along the production possibilities frontier.
   C) the points of the horizontal and vertical intercepts.
   D) the points outside the production possibilities frontier.

Answer: D
9. Refer to Figure 2-1. Point A is A)
   technically efficient.
   B) unattainable with current resources.
   C) inefficient in that not all resources are being used.
   D) the equilibrium output combination.
   Answer: C

Diff: 1    Type: MC    Page Ref: 38/38
Topic: Production Possibilities Frontier and Opportunity Costs
Skill: Conceptual
Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs
AACSB Coding: Reflective Thinking
Special Feature: None
10. Refer to Figure 2-1. Point B is A)
   technically efficient.
   B) unattainable with current resources.
   C) inefficient in that not all resources are being used.
   D) the equilibrium output combination.
Answer: A

11. Refer to Figure 2-1. Point C is A)
   technically efficient.
   B) unattainable with current resources.
   C) inefficient in that not all resources are being used.
   D) is the equilibrium output combination.
Answer: B

12. In a production possibilities frontier model, a point inside the frontier is A) allocatively efficient.
   B) productively efficient
   C) allocatively inefficient.
   D) productively inefficient.
Answer: D
13. Bella can produce either a combination of 60 silk roses and 80 silk leaves or a combination of 70 silk roses and 55 silk leaves. If she now produces 60 silk roses and 80 silk leaves, what is the opportunity cost of producing an additional 10 silk roses? A) 25 silk leaves. B) 2.5 silk leaves. C) 55 silk leaves. D) 10 silk leaves
Answer: A

Diff: 2 Type: MC Page Ref: 39/39
Topic: Production Possibilities Frontier and Opportunity Costs
Skill: Conceptual
Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs
AACSB Coding: Analytic Skills
Special Feature: None

14. If the production possibilities frontier is linear, then
   A) opportunity costs are decreasing as more of one good is produced.
   B) it is easy to efficiently produce output.
   C) opportunity costs are increasing as more of one good is produced.
   D) opportunity costs are constant as more of one good is produced.
Answer: D

Diff: 2 Type: MC Page Ref: 39/39
Topic: Production Possibilities Frontier and Opportunity Costs
Skill: Conceptual
Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs
AACSB Coding: Reflective Thinking
Special Feature: None
Figure 2-2 above shows the production possibilities frontier for Mendonca, an agrarian nation that produces two goods, meat and vegetables.

15. Refer to Figure 2-2. What is the opportunity cost of one pound of vegetables?
   A) $\frac{3}{4}$ pounds of meat  
   B) 1.2 pounds of meat  
   C) 1 $\frac{1}{3}$ pounds of meat  
   D) 12 pounds of meat
   Answer: A

16. Refer to Figure 2-2. What is the opportunity cost of one pound of meat?
   A) $\frac{3}{4}$ pounds of vegetables  
   B) 1.6 pounds of vegetables  
   C) 1 $\frac{1}{3}$ pounds of vegetables  
   D) 16 pounds of vegetables
   Answer: C

17. Refer to Figure 2-2. Suppose Mendonca is currently producing 60 pounds of vegetables per period. How much meat is it also producing, assuming that resources are fully utilized?
   A) 45 pounds of meat  
   B) 75 pounds of meat
C) 80 pounds of meat
D) 100 pounds of meat

Answer: B

18. Refer to Figure 2-2. The linear production possibilities frontier in the figure indicates that
A) Mendonca has a comparative advantage in the production of vegetables.
B) Mendonca has a comparative disadvantage in the production of meat.
C) the tradeoff between meat and vegetables is constant.
D) it is progressively more expensive to produce meat.

Answer: C

19. A production possibilities frontier with a bowed outward shape indicates A) the possibility of inefficient production.
   B) constant opportunity costs as more and more of one good is produced.
   C) increasing opportunity costs as more and more of one good is produced.
   D) decreasing opportunity costs as more and more of one good is produced.

Answer: C
20. Increasing opportunity cost along a bowed out production possibilities frontier occurs because
   A) of inefficient production.
   B) of ineffective management by entrepreneurs.
   C) some factors of production are not equally suited to producing both goods or services.
   D) of the scarcity of factors of production.
   Answer: C

21. The slope of a production possibilities frontier A) has no economic relevance or meaning.
   B) is always constant.
   C) is always varying.
   D) measures the opportunity cost of producing one more unit of a good.
   Answer: D

22. Increasing marginal opportunity cost implies that
   A) the more resources already devoted to any activity, the payoff from allocating yet more resources to that activity increases by progressively smaller amounts.
   B) the more resources already devoted to any activity, the benefits from allocating yet more resources to that activity decreases by progressively larger amounts.
   C) that rising opportunity costs makes it inefficient to produce beyond a certain quantity.
   D) the law of scarcity.
   Answer: A
23. If opportunity costs are constant, the production possibilities frontier would be graphed as
   A) a ray from the origin.
   B) a positively sloped straight line.
   C) a negatively sloped curve bowed in toward the origin.
   D) a negatively sloped straight line.
   Answer: D
   Diff: 1      Type: MC      Page Ref: 40/40
   Topic: Production Possibilities Frontier and Opportunity Costs
   Skill: Conceptual
   Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs
   AACSB Coding: Reflective Thinking
   Special Feature: None
24. Refer to Figure 2-3. Carlos Vanya grows tomatoes and strawberries on his land. His land is equally suited for growing either fruit. Which of the graphs in Figure 2-3 represent his production possibilities frontier?

A) Graph A  
B) Graph B  
C) Graph C  
D) Either Graph A or Graph B  
E) Either graph B or Graph C

Answer: A  
Diff: 2  
Type: MC  
Page Ref: 40/40  
Topic: Production Possibilities Frontier and Opportunity Costs  
Skill: Conceptual  
Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs  
AACSB Coding: Reflective Thinking  
Special Feature: None

25. Refer to Figure 2-3. Carlos Vanya grows tomatoes and strawberries on his land. A portion of his land is more suitable for growing tomatoes and the other portion is better suited for strawberry cultivation. Which of the graphs in Figure 2-3 represent his production possibilities frontier?

A) Graph A  
B) Graph B  
C) Graph C  
D) either Graph A or Graph B  
E) either graph B or Graph C

Answer: C  
Diff: 2  
Type: MC  
Page Ref: 42/42  
Topic: Production Possibilities Frontier and Opportunity Costs  
Skill: Conceptual  
Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs  
AACSB Coding: Reflective Thinking  
Special Feature: None
26. An outward shift of a nation’s production possibilities frontier can occur due to A) a reduction in unemployment.
   B) a natural disaster like a hurricane or bad earthquake.
   C) a change in the amounts of one good desired.
   D) an increase in the labor force.
   Answer: D
   Diff: 2  Type: MC  Page Ref: 43/43
   Topic: Production Possibilities Frontier and Opportunity Costs
   Skill: Conceptual
   Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs
   AACSB Coding: Reflective Thinking
   Special Feature: None

27. An outward shift of a nation’s production possibilities frontier represents A) economic growth.
   B) rising prices of the two goods on the production possibilities frontier model.
   C) an impossible situation.
   D) a situation in which a country produces more of one good and less of another.
   Answer: A
   Diff: 1  Type: MC  Page Ref: 43/43
   Topic: Production Possibilities Frontier and Opportunity Costs
   Skill: Conceptual
   Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs
   AACSB Coding: Reflective Thinking
   Special Feature: None

28. Economic growth is represented on a production possibilities frontier model by the production possibility frontier A) shifting outward.
   B) shifting inward.
   C) becoming steeper.
   D) becoming flatter.
   Answer: A
   Diff: 1  Type: MC  Page Ref: 43/43
   Topic: Production Possibilities Frontier and Opportunity Costs
   Skill: Conceptual
   Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs
   AACSB Coding: Reflective Thinking
   Special Feature: None
29. Without an increase in the supplies of factors of production, how can a nation achieve economic growth?
   A) by producing more high-value goods and less of low-value goods
   B) through technological advancement which enables more output with the same quantity of resources
   C) by lowering the prices of factors of production
   D) by increasing the prices of factors of production

   Answer: B

30. Which of the following would shift a nation's production possibilities frontier inward?
   A) discovering a cheap way to convert sunshine into electricity
   B) producing more capital equipment
   C) an increase in the unemployment rate
   D) a law requiring workers to retire at age 50

   Answer: D
Figure 2-4 shows various points on three different production possibilities frontiers for a nation.

31. **Refer to Figure 2-4.** A movement from X to Y
   A) could be due to a change in consumers’ tastes and preferences.
   B) could occur because of an influx of immigrant labor.
   C) is the result of advancements in food production technology only, with no change in the technology for plastic production.
   D) is the result of advancements in plastic production technology only, with no change in food production technology.

   Answer: B  
   **Diff:** 2  
   **Type:** MC  
   **Page Ref:** 43/43
32. Refer to Figure 2-4. A movement from Y to Z
A) represents an increase in the demand for plastic products.
B) could occur because of general technological advancements.
C) is the result of advancements in food production technology.
D) is the result of advancements in plastic production technology.
Answer: D
Diff: 2 Type: MC Page Ref: 43/43

33. Refer to following events:

Figure 2- a. an increase in the unemployment rate
b. a decrease in a nation's money supply
Consider c. a war that kills a significant portion of a nation's population

Which of the events listed above could cause a movement from Y to W?
A) a, b and c
B) a and b
only C) a and c only
D) a only
E) c only
Answer: E
Diff: 2 Type: MC Page Ref: 43/43

34. Refer to Figure 2-4. Consider the following movements:
a. from point V to point W
b. from point W to point Y
c. from point Y to point Z
Which of the movements listed above represents economic growth?

A) a, b, and c  
B) b and c only  
C) a only  
D) b only  
Answer: B

35. Refer to Figure 2-4. Consider the following events:
   a. a decrease in the unemployment rate  
   b. general technological advancement  
   c. an increase in consumer wealth  

Which of the events listed above could cause a movement from V to W?

A) a only  
B) a and b only  
C) b and c only  
D) a, b, and c.  
Answer: A
36. Refer to Figure 2-4. Consider the following events:

a. a reduction in the patent protection period to no more than 2 years
b. a war that destroys a substantial portion of a nation's capital stock
c. the lack of secure and enforceable property rights system

Which of the events listed above could cause a movement from W to V?

A) a only  B) a and b only  C) a and c only  
D) b and c only  E) a, b, and c

Answer: C

37. The Great Depression of the 1930s with a large number of workers and factories unemployed would be represented in a production possibilities frontier graph by

A) a point inside the frontier. 
B) a point outside the frontier. 
C) a point on the frontier. 
D) an intercept on either the vertical or the horizontal axis.

Answer: A
38. Suppose there is some unemployment in the economy and society decides that it wants more of one good. Which of the following statements is true?
   A) It is not possible to achieve this unless technology advances.
   B) It can increase output without giving up another good by employing more resources.
   C) It will have to increase resource supplies.
   D) It will have to give up production and consumption of some other good.
   Answer: B

39. If society decides it wants more of one good and all resources are fully utilized, then
   A) it is unable to do this unless technology advances.
   B) additional resource supplies will have to be found.
   C) it has to give up some of another good and incur some opportunity costs.
   D) more unemployment will occur.
   Answer: C

40. According to the production possibility model, if more resources are allocated to the
   production of physical and human capital, then all of the following are likely to happen except
   A) fewer goods will be produced for consumption today.
B) the production possibilities frontier will be shift outward in the future
C) future economic growth is enhanced.
D) the country’s total production will fall.
Answer: D

41. Refer to Figure 2-5. If the economy is currently producing at point Y, what is the opportunity cost of moving to point W?
   A) 2 million tons of steel  B) zero
   C) 9 million tons of paper  D) 16 million tons of paper
Answer: B

42. Refer to Figure 2-5. If the economy is currently producing at point W, what is the opportunity cost of moving to point X?
A) 3 million tons of steel  
B) 19 million tons of steel  
C) 5 million tons of paper  
D) 9 million tons of paper  
Answer: C  
Diff: 1 Type: MC Page Ref:  
Topic: Production Possibilities Frontier and Opportunity Costs  
Skill: Conceptual  
Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs  
AACSB Coding: Analytic Skills  
Special Feature: An Inside Look: BMW Managers Change Production Strategy  

43. In a report made to the US Congress in 2001, the National Academy of Sciences cautioned that if fuel economy encourages the production of smaller and lighter cars, “Some additional traffic fatalities would be expected.” This statement suggests that  
A) US auto manufacturers are more concerned about producing fuel efficient cars to compete with their Japanese and South Korean rivals than about consumer safety.  
B) there is a tradeoff between safety and fuel economy.  
C) society should value safety more highly than fuel economy.  
D) society should value fuel economy more highly than consumer safety because of the long term environment benefits generated by less gasoline use. Answer: B  
Diff: 2 Type: MC Page Ref: 43/43  
Topic: Production Possibilities Frontier and Opportunity Costs  
Skill: Conceptual  
Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs  
AACSB Coding: Reflective Thinking  
Special Feature: None  

44. Suppose your expenses for this term are as follows: tuition: $5,000, room and board: $3,000, books and other educational supplies: $500. Further, during the term, you can only work part-time and earn $4,000 instead of your full-time salary of $10,000. What is the opportunity cost of going to college this term, assuming that your room and board expenses would be the same even if you did not go to college?  
A) $5,500  
B) $8,500  
C) $11,500  
D) $14,500  
Answer: C  
Diff: 3 Type: MC Page Ref: 43/43
45. The opportunity cost of taking a semester-long economics class is A) the cost of tuition and fees only.
   B) the value of the time spent in the classroom.
   C) zero because there is no admission charged if you are enrolled in the course.
   D) equal to the highest value of an alternative use of the time and money spent on the class.
   E) the knowledge and enjoyment you receive from attending the class.

   Answer: D
   Diff: 2    Type: MC    Page Ref: 43/43

German auto producer, BMW currently produces two types of automobiles sports utility vehicles (SUVs) and coupes in its US plant. Since it opened in 1994, the company had made and continues to make several strategic production decisions. Figure 2-6 shows changes to its production possibilities frontier in response to some of these production strategies.

46. Refer to Figure 2-6. Between 1995 and 2003, worker productivity increased so that the total number of vehicles produced increased as the company added more machinery, workers and changed the layout of the factory. This is best represented by the A) movement from E to F in Graph A.
B) movement from G to H in Graph B.
C) movement from G to H in Graph C.
D) Movement from J to H in Graph B.
Answer: B

47. Refer to Figure 2-6. In response to changing consumer demands, BMW has cut back on the production of coupes and increased its production of SUVs. This strategy is best represented by
   A) movement from E to F in Graph A.
   B) movement from G to H in Graph B.
   C) movement from K to L in Graph C.
   D) Movement from J to H in Graph B.
Answer: D

48. Refer to Figure 2-6. In 2005, the company had to shut down a portion of its facility as it worked on remodeling the facility to merge two of its separate assembly lines in preparation for the production of a new model. The production decision to shut down temporarily will result in a
   A) movement from E to F in Graph A.
   B) movement from G to H in Graph B.
   C) movement from K to L in Graph C.
   D) Movement from J to H in Graph B.
Answer: C
49. Hurricane Katrina which hit the Gulf Coast region in August 2005, resulted in massive flooding which destroyed large sections of New Orleans. Suppose prior to this event, New Orleans was producing an output combination given by a point on its production possibilities frontier. How did the hurricane affect its production possibilities frontier?
   A) New Orleans’ output combination moved from a point on the frontier to a point given by one of the intercepts.
   B) The production possibilities frontier does not shift but there is a movement from a point on the frontier to a point inside the frontier.
   C) The production possibilities frontier shifts inwards.
   D) The production possibilities frontier no longer exists.
   Answer: C

50. An increase in the unemployment rate may be represented as a movement from a point on the production possibilities frontier to a point inside the frontier.
   Answer: True

51. If a country is producing efficiently and is on the production possibilities frontier, the only way to produce more of one good is to produce less of the other.
   Answer: True

52. Consider a country that produces only two goods: pineapples and tractors. Suppose, it is possible for this country to increase its production of pineapples without producing fewer tractors, then its current output combination is inefficient.
   Answer: True
53. Any output combination outside a production possibility frontier is associated with unused or underutilized resources.
   Answer: True
   Diff: 1 Type: TF Page Ref: 39/39
   Topic: Production Possibilities Frontier and Opportunity Costs
   Skill: Conceptual
   Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs
   AACSB Coding: Reflective Thinking
   Special Feature: None

54. An increase in population shifts the production possibility frontier inwards over time.
   Answer: False
   Diff: 1 Type: TF Page Ref: 43/43
   Topic: Production Possibilities Frontier and Opportunity Costs
   Skill: Conceptual
   Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs
   AACSB Coding: Reflective Thinking
   Special Feature: None

55. If additional units of a good could be produced at a constant opportunity cost, the production possibility frontier would be bowed outward (concave).
   Answer: True
   Diff: 2 Type: TF Page Ref: 42/42
   Topic: Production Possibilities Frontier and Opportunity Costs
   Skill: Conceptual
   Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs
   AACSB Coding: Reflective Thinking
   Special Feature: None

56. On a diagram of a production possibility frontier, opportunity cost is represented by the slope of the production possibility frontier.
   Answer: True
   Diff: 2 Type: TF Page Ref: 39/39
   Topic: Production Possibilities Frontier and Opportunity Costs
   Skill: Conceptual
   Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs
   AACSB Coding: Reflective Thinking
   Special Feature: None
57. To increase gas mileage, automobile manufacturers make cars small and light. Large cars absorb more of the impact of an accident than small cars but yield lower gas mileage. These facts suggest that there exists a negative relationship between safety and gas mileage.

Answer: True

Topic: Production Possibilities Frontier and Opportunity Costs
Skill: Analytical

58. a. Draw a production possibilities frontier for a country that produces two goods, wine and cheese. Assume that resources are not equally suited to both tasks.

b. Define opportunity costs.

c. Use your production possibilities frontier graph to demonstrate the principle of opportunity costs.

Answer: a. The PPF is concave (bowed away from the origin) to reflect the fact that resources are not equally suited to both tasks.
b. Opportunity cost is defined as the highest valued alternative that must be forgone by taking an action.

c. In the PPF graph in part (a), suppose the country is currently producing at point $A$ and wishes to move to point $B$ so that it can produce more wine. The only way it can obtain more wine is to give up some amount of cheese.
Refer to Table 2-1. The Fruit Farm produces only apples and pears. The table above shows the maximum possible output combinations of the two fruits using all resources and currently available technology.

<table>
<thead>
<tr>
<th>Possible Output Combinations</th>
<th>Apples (thousands of pounds)</th>
<th>Pear (thousands of pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>70</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>C</td>
<td>50</td>
<td>36</td>
</tr>
<tr>
<td>D</td>
<td>40</td>
<td>48</td>
</tr>
<tr>
<td>E</td>
<td>30</td>
<td>56</td>
</tr>
<tr>
<td>F</td>
<td>20</td>
<td>60</td>
</tr>
<tr>
<td>G</td>
<td>10</td>
<td>63</td>
</tr>
<tr>
<td>H</td>
<td>0</td>
<td>65</td>
</tr>
</tbody>
</table>

Refer to Table 2-1. The Fruit Farm produces only apples and pears. The table above shows the maximum possible output combinations of the two fruits using all resources and currently available technology.

a. Graph The Fruit Farm's production possibilities frontier. Put apples on the horizontal axis and pears on the vertical axis. Be sure to identify the output combination points on your diagram.

b. Suppose The Fruit farm is currently producing at point D. What is the opportunity cost of producing an additional 8,000 pounds of pears?

c. Suppose The Fruit farm is currently producing at point D. What happens to the opportunity cost of producing more and more pears? Does it increase, decrease or remain constant? Explain your answer.

d. Suppose The Fruit farm is currently producing at point G. What happens to the opportunity cost of producing more and more apples? Does it increase, decrease or remain constant? Explain your answer.

e. Suppose Fruit farm is plagued by the apple maggot infestation which destroys apple trees but not pears. Show in a graph what happens to its PPF.
Answer:

a. Example to move to E, the Fruit Farm has to give up 10,000 pounds of apples to produce an additional 8,000 pounds of pears. For each additional 10,000 pounds of apples foregone, the payoff in terms of pears gets progressively smaller.

d. It increases. Each time it wants to produce an additional 10,000 of apples, more and more pears must be given up.
increases. For

**Diff: 3 Type: ES Page Ref: 40/40**

**Topic: Production Possibilities Frontier and Opportunity Costs**

**Skill: Analytical**

**Objective: LO 1: Use a production possibilities frontier to analyze opportunity costs and trade-offs**

**AACSB Coding: Analytic Skills**

**Special Feature: Solved Problem: Drawing a Production Possibilities Frontier for Rosie’s Boston Bakery**

### 2.2 Comparative Advantage and Trade

1. You have an absolute advantage whenever you
   A) are better educated than someone else.
   B) can produce more of something than others with the same resources.
   C) prefer to do one particular activity.
   D) can produce something at a lower opportunity cost than others.
   Answer: B

**Diff: 1 Type: MC Page Ref: 46/46**

**Topic: Comparative Advantage and Trade**

**Skill: Definition**

**Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade**

**AACSB Coding: Reflective Thinking**

**Special Feature: None**

<table>
<thead>
<tr>
<th></th>
<th>George</th>
<th>Jack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lawns Mowed</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Gardens Cultivated</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 2-2 shows the output per day of two gardeners, George and Jack. They can either devote their time to mowing lawns or cultivating gardens.

2. **Refer to Table 2-2.** Which of the following statements is true? A) Jack has an absolute advantage in both tasks.
   B) George has an absolute advantage in both tasks.
   C) Jack has an absolute advantage in lawn mowing and George in garden cultivating.
   D) Jack has an absolute advantage in garden cultivating and George in lawn mowing.
   Answer: B

**Diff: 1 Type: MC Page Ref: 45/45**

**Topic: Comparative Advantage and Trade**

**Skill: Conceptual**

**Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade**
3. Refer to Table 2-2. What is Jack's opportunity cost of mowing a lawn? A) half a garden cultivated.  
   B) two lawns mowed.  
   C) two-thirds of a garden cultivated.  
   D) one and a half lawns mowed.  
   Answer: C  
   Diff: 2  Type: MC  Page Ref: 45/45  
   Topic: Comparative Advantage and Trade  
   Skill: Conceptual  
   Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade  
   AACSB Coding: Analytic Skills  
   Special Feature: None

4. Refer to Table 2-2. What is Jack's opportunity cost of cultivating a garden?  
   A) half a garden cultivated  
   B) two lawns mowed  
   C) two-thirds of a garden cultivated.  
   D) one and a half lawns mowed  
   Answer: D  
   Diff: 2  Type: MC  Page Ref: 45/45  
   Topic: Comparative Advantage and Trade  
   Skill: Conceptual  
   Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade  
   AACSB Coding: Analytic Skills  
   Special Feature: None

5. Refer to Table 2-2. What is George's opportunity cost of mowing a lawn?  
   A) half a garden cultivated  
   B) two lawns mowed  
   C) two-thirds of a garden cultivated.  
   D) one and a half lawns mowed  
   Answer: A  
   Diff: 2  Type: MC  Page Ref: 45/45  
   Topic: Comparative Advantage and Trade  
   Skill: Conceptual  
   Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade  
   AACSB Coding: Analytic Skills  
   Special Feature: None
6. Refer to Table 2-2. What is George's opportunity cost of cultivating a garden?
   A) half a garden cultivated
   B) two lawns mowed
   C) two-thirds of a garden cultivated
   D) one and a half lawns mowed

   Answer: B

   Refer to Table 2-2. Which of the following statements is true?

   7. A) Jack has a comparative advantage in both tasks.
      B) George has a comparative advantage in both tasks.
      C) Jack has a comparative advantage in lawn mowing and George in garden cultivating.
      D) Jack has a comparative advantage in garden cultivating and George in lawn mowing.

   Answer: D
8. Comparative advantage means
   A) the ability to produce more of a product with the same amount of resources than any other producer.
   B) the ability to produce a good or service at a lower opportunity cost than any other producer.
   C) the ability to produce a good or service at a higher opportunity cost than any other producer.
   D) compared to others you are better at producing a product.
   Answer: B

9. Specializing in the production of a good or service in which one has a comparative advantage enables a country to do all of the following except A) engage in mutually beneficial trade with other nations.
   B) increase the variety of products that it can consume with no increase in resources.
   C) consume a combination of goods that lie outside its own production possibilities frontier.
   D) produce a combination of goods that lie outside its own production possibilities frontier.
   Answer: D

For each watch that Switzerland produces, it gives up the opportunity to make 50 pounds of chocolate. Germany can produce 1 watch for every 100 pounds of chocolate it produces. Which of the following is true about the comparative advantage between the two countries?
10. A) Switzerland has the comparative advantage in chocolate. 
   B) Switzerland has the comparative advantage in watches. 
   C) Germany has the comparative advantage in watches and chocolate. 
   D) Germany has the comparative advantage in watches. 
   Answer: B 

12. Refer to Figure 2-7. What is the opportunity cost of producing 1 bolt of cloth in Pakistan? 
   A) 5/8 pounds of cashews 
   B) 3/8 pounds of cashews 
   C) 1 3/5 pounds of cashews D) 150 pounds of cashews 
   Answer: A 

Figure 2-7 shows the production possibilities frontiers for Pakistan and Indonesia. Each country produces two goods, cotton and cashews.
Refer to Figure 2-7. What is the opportunity cost of producing 1 bolt of cloth in Indonesia?

13. A) 5/8 pounds of cashews  
    B) 3/8 pounds of cashews  
    C) 2 2/3 pounds of cashews  
    D) 120 pounds of cashews  
    Answer: B  
    Diff: 2 Type: MC Page Ref: 46-7/46-7  
    Topic: Comparative Advantage and Trade  
    Skill: Conceptual  
    Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade  
    AACSB Coding: Analytic Skills  
    Special Feature: None

14. Refer to Figure 2-7. What is the opportunity cost of producing 1 pound of cashews in Pakistan?  
    A) 5/8 bolts of cotton  
    B) 3/8 bolts of cotton  
    C) 1 3/5 bolts of cotton  
    D) 240 bolts of cotton  
    Answer: C  
    Diff: 2 Type: MC Page Ref: 46-7/46-7  
    Topic: Comparative Advantage and Trade  
    Skill: Conceptual  
    Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade  
    AACSB Coding: Analytic Skills  
    Special Feature: None

15. Refer to Figure 2-7. What is the opportunity cost of producing 1 pound of cashews in Indonesia?  
    A) 5/8 bolts of cotton  
    B) 3/8 bolts of cotton  
    C) 320 bolts of cotton  
    D) 2 2/3 bolts of cotton  
    Answer: D  
    Diff: 2 Type: MC Page Ref: 46-7/46-7
Refer to Figure 2-7. Which country has a comparative advantage in the production of cotton?

A) Indonesia  
B) They have equal productive abilities.  
C) Pakistan  
D) neither country  
Answer: A

Diff: 2 Type: MC Page Ref: 46-7/46-7

Refer to Figure 2-7. Which country has a comparative advantage in the production of cashews?

A) Indonesia  
B) They have equal productive abilities.  
C) Pakistan  
D) neither country  
Answer: C

Diff: 2 Type: MC Page Ref: 46-7/46-7
18. Refer to Figure 2-7. If the two countries have the same amount of resources and the same technological knowledge, which country has an absolute advantage in the production of cotton?
   A) Indonesia
   B) They have the same advantage.
   C) Pakistan
   D) cannot be determined.
Answer: A

Diff: 2 Type: MC Page Ref: 46-7/46-7
Topic: Comparative Advantage and Trade
Skill: Conceptual
Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade
AACSB Coding: Analytic Skills
Special Feature: None

19. Individuals who have never been the best at doing anything
   A) cannot have a comparative advantage in producing any product.
   B) can still have a comparative advantage in producing some product.
   C) perform all tasks at a higher opportunity cost than others.
   D) must have an absolute advantage in at least one task.
Answer: B

Diff: 2 Type: MC Page Ref: 46-7/46-7
Topic: Comparative Advantage and Trade
Skill: Conceptual
Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade
AACSB Coding: Reflective Thinking
Special Feature: None

Table 2-3

<table>
<thead>
<tr>
<th></th>
<th>One Digital Camera</th>
<th>Wheat (per pound)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>100 hours</td>
<td>4 hours</td>
</tr>
</tbody>
</table>
Table 2-3 shows the number of labor hours required to produce a digital camera and a pound of wheat in China and South Korea.

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>South Korea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Camera</td>
<td>60 hours</td>
<td>3 hours</td>
</tr>
<tr>
<td>Wheat</td>
<td>3 hours</td>
<td>60 hours</td>
</tr>
</tbody>
</table>

20. Refer to Table 2-3. Does either China or South Korea have an absolute advantage and if so, in what product?

A) South Korea has an absolute advantage in wheat.
B) China has an absolute advantage in wheat.
C) South Korea has an absolute advantage in both products.
D) China has an absolute advantage in digital cameras.

Answer: C

21. Refer to Table 2-3. What is China’s opportunity cost of producing one digital camera?

A) 25 pounds of wheat
B) 40 pounds of wheat
C) 0.04 pounds of wheat
D) 4 pounds of wheat

Answer: A
22. **Refer to Table 2-3.** What is South Korea’s opportunity cost of producing one digital camera?
   A) 25 pounds of wheat  
   B) 20 pounds of wheat  
   C) 60 pounds of wheat  
   D) 0.05 pounds of wheat  
   Answer: B  
   **Diff: 2**  
   **Type: MC**  
   **Page Ref: 48/48**  
   **Topic: Comparative Advantage and Trade**  
   **Skill: Conceptual**  
   **Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade**  
   **AACSB Coding: Analytic Skills**  
   **Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade**

23. **Refer to Table 2-3.** What is China’s opportunity cost of producing one pound of wheat?
   A) 0.04 units of a digital camera  
   B) 40 digital cameras  
   C) 25 digital cameras  
   D) 4 digital cameras  
   Answer: A  
   **Diff: 2**  
   **Type: MC**  
   **Page Ref: 48/48**  
   **Topic: Comparative Advantage and Trade**  
   **Skill: Conceptual**  
   **Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade**  
   **AACSB Coding: Analytic Skills**  
   **Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade**

24. **Refer to Table 2-3.** What is South Korea’s opportunity cost of producing one pound of wheat?
   A) 5 digital cameras  
   B) 60 digital cameras  
   C) 20 digital cameras  
   D) 0.05 units of a digital camera  
   Answer: D  
   **Diff: 2**  
   **Type: MC**  
   **Page Ref: 48/48**  
   **Topic: Comparative Advantage and Trade**  
   **Skill: Conceptual**  
   **Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade**  
   **AACSB Coding: Analytic Skills**  
   **Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade**
Refer to Table 2-3.

25. China has a comparative advantage in
   A) both products.
   B) wheat production.
   C) digital camera production.
   D) neither product.
   Answer: B
   Diff: 2 Type: MC Page Ref: 48/48
   Topic: Comparative Advantage and Trade
   Skill: Conceptual
   Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade
   AACSB Coding: Analytic Skills
   Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

26. Refer to Table 2-3. South Korea has a comparative advantage in
   A) both products.
   B) wheat production.
   C) digital camera production.
   D) neither product.
   Answer: C
   Diff: 2 Type: MC Page Ref: 48/48
   Topic: Comparative Advantage and Trade
   Skill: Conceptual
   Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade
   AACSB Coding: Analytic Skills
   Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

27. Refer to Table 2-3. If the two countries specialize and trade, who should export wheat?
   A) There is no basis for trade between the two countries.
   B) China
   C) South Korea
   D) They should both be exporting wheat.
   Answer: B
   Diff: 1 Type: MC Page Ref: 48/48
   Topic: Comparative Advantage and Trade
   Skill: Conceptual
   Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade
   AACSB Coding: Analytic Skills
   Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade
Refer to Table 2-3.

28. If the two countries specialize and trade, who should export digital cameras?
   A) There is no basis for trade between the two countries.
   B) China
   C) South Korea
   D) They should both be importing digital cameras.
   Answer: C
   Diff: 1    Type: MC    Page Ref: 48
   Topic: Comparative Advantage and Trade
   Skill: Conceptual
   Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade
   AACSB Coding: Analytic Skills
   Special Feature: Solved Problem: Comparative Advantage and the Gains from Trade

29. If the best lawyer in town is also the best at operating a word processor, then according to economic reasoning, this person should
   A) split her time evenly between being a lawyer and a word processor.
   B) specialize in being a lawyer because its opportunity cost is lower.
   C) should pursue the activity she enjoys more.
   D) specialize in being a work processor because it is more capital-intensive.
   Answer: B
   Diff: 1    Type: MC    Page Ref: 46-7
   Topic: Comparative Advantage and Trade
   Skill: Conceptual
   Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade
   AACSB Coding: Reflective Thinking
   Special Feature: None

30. Rayburn Reed is a highly talented photographer. He has chosen to specialize in photography because of all of the following except
   A) he obviously has a comparative advantage in photography.
   B) his opportunity cost of pursuing another career is very low.
   C) for him, this is the most lucrative way to purchase the products that he wants to consume.
Refer to Table 2-3.

D) his photographs are highly esteemed by art lovers who are willing to pay very high prices.
Answer: B

**Diff:** 3  **Type:** MC  **Page Ref:** 46-7/46-7

**Topic:** Comparative Advantage and Trade

**Skill:** Analytical

**Objective:** LO 2: Understand comparative advantage and explain how it is the basis for trade

**AACSB Coding:** Reflective Thinking

**Special Feature:** None
31. If Blake can pick more cherries in one hour than Cody, then Blake has a comparative advantage in cherry picking. Answer: True

Diff: 2  Type: TF  Page Ref: 46/46
Topic: Comparative Advantage and Trade
Skill: Conceptual
Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade
AACSB Coding: Reflective Thinking
Special Feature: None

32. The basis for trade is comparative advantage, not absolute advantage. Answer: True

Diff: 2  Type: TF  Page Ref: 47/47
Topic: Comparative Advantage and Trade
Skill: Conceptual
Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade
AACSB Coding: Reflective Thinking
Special Feature: None

33. Suppose a country produces only two goods, then it is not possible to have a comparative advantage in the production of both those goods. Answer: True

Diff: 2  Type: TF  Page Ref: 47/47
Topic: Comparative Advantage and Trade
Skill: Conceptual
Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade
AACSB Coding: Reflective Thinking
Special Feature: None

34. In a two-good, two country world, if one country has an absolute advantage in the production of both goods, it cannot benefit by trading with the other country. Answer: True

Diff: 2  Type: TF  Page Ref: 47/47
Topic: Comparative Advantage and Trade
Skill: Conceptual
Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade
AACSB Coding: Reflective Thinking
Special Feature: None

35. If the opportunity cost of producing more of one good increases as more of that good is produced, then the production method is inefficient. Answer: True

Diff: 2  Type: TF  Page Ref: 47/47
Topic: Comparative Advantage and Trade
Skill: Conceptual
Objective: LO 2: Understand comparative advantage and explain how it is the basis for trade
AACSB Coding: Reflective Thinking Special Feature: None

36. It is possible to have a comparative advantage in producing a good or service without having an absolute advantage.
Answer: True False

37. Table 2-4

<table>
<thead>
<tr>
<th></th>
<th>Digital Camera</th>
<th>Wheat (bushels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>100 hours</td>
<td>5 hours</td>
</tr>
<tr>
<td>South Korea</td>
<td>90 hours</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

Refer to Table 2-4. This table shows the number of labor hours required to produce a digital camera and a bushel of wheat in China and South Korea.

a. Which country has an absolute advantage in the production of digital cameras?
b. Which country has an absolute advantage in the production of wheat?
c. What is China’s opportunity cost of producing one digital camera?
d. What is South Korea’s opportunity cost of producing one digital camera?
e. What is China’s opportunity cost of producing one pound of wheat?
f. What is South Korea’s opportunity cost of producing one pound of wheat?
g. If each country specializes in the production of the product in which it has a comparative advantage, who should produce digital cameras?
h. If each country specializes in the production of the product in which it has a comparative advantage, who should produce wheat?

Answer: a. South Korea has an absolute advantage in the production of digital cameras.
b. South Korea has an absolute advantage in wheat production.
c. China’s the opportunity cost of producing one digital camera is 20 bushels of wheat.
d. South Korea’s opportunity cost of producing one digital camera is 30 bushels of wheat.
e. China’s the opportunity cost of one bushel of wheat is 0.05 units of a digital camera.
f. South Korea’s the opportunity cost of one bushel of wheat is 0.03 units of a digital camera.

g. China should specialize in producing digital cameras.

h. South Korea should specialize in producing wheat.

Refer to Table 2-5. This table shows the number of labor hours required to produce a digital camera and a bushel of wheat in China and South Korea.

<table>
<thead>
<tr>
<th></th>
<th>Digital Camera</th>
<th>Wheat (bushels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>100 hours</td>
<td>5 hours</td>
</tr>
<tr>
<td>South Korea</td>
<td>90 hours</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

Refer to Table 2-6: Production and Consumption with no Trade

<table>
<thead>
<tr>
<th></th>
<th>Digital Camera Output</th>
<th>Wheat Output (bushels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Korea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c. If the two countries do not trade and consume whatever they produce, identify the current production and consumption point for each country on their respective production possibilities frontiers. Label China’s consumption point “C” and South Korea’s consumption point, “K”.

d. Suppose the two countries specialize and trade. Who should produce digital cameras and who should produce wheat? Explain your answer.

e. Complete Table 2-7 below to show each country’s output with specialization.
Chapter 2: Trade-offs, Comparative Advantage, and the Market System

Table 2-7: Output with Specialization

<table>
<thead>
<tr>
<th></th>
<th>Digital Camera Output</th>
<th>Wheat Output (bushels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Korea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

f. Did specialization increase the combined output for the two countries without any increase in resources? If so, by how much?

g. Suppose China and South Korea agree to trade so that in exchange for 1,200 bushels of wheat, the exporter of wheat receives 48 digital cameras. Complete Table 2.8 below to show each country’s consumption bundle after trade.

h. Show the consumption points after trade on each country’s production possibilities frontier. Label these points “B” for China and “J” for Korea.

i. Has trade made the two countries better off? Explain your answer.

Table 2-8: Consumption with Trade

<table>
<thead>
<tr>
<th></th>
<th>Digital Camera</th>
<th>Wheat (bushels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>42</td>
<td>1,200</td>
</tr>
<tr>
<td>South Korea</td>
<td>48</td>
<td>1,800</td>
</tr>
</tbody>
</table>

Answer: a.
Chapter 2: Trade-offs, Comparative Advantage, and the Market System

b. Table 2-6: Production and Consumption with no Trade

<table>
<thead>
<tr>
<th></th>
<th>Digital Camera Output</th>
<th>Wheat Output (bushels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>36</td>
<td>1,080</td>
</tr>
<tr>
<td>South Korea</td>
<td>40</td>
<td>1,800</td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>2,800</td>
</tr>
</tbody>
</table>

c. See graph in part (a)
d. China should specialize in producing digital cameras because it has a lower opportunity cost: 20 bushels of wheat as opposed to South Korea’s 30 bushels of wheat. South Korea should specialize in producing wheat because it has a lower opportunity cost: 0.03 units of a digital camera as opposed to China’s 0.05 units of a digital camera.

e. Table 2-7: Output with Specialization

<table>
<thead>
<tr>
<th></th>
<th>Digital Camera Output</th>
<th>Wheat Output (bushels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>South Korea</td>
<td>0</td>
<td>8,000</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>8,000</td>
</tr>
</tbody>
</table>
f. Yes, digital camera output increased by 14 units from 76 to 90 units and wheat output increased by 120 bushels.

g. 

Table 2-8: Consumption with Trade

<table>
<thead>
<tr>
<th></th>
<th>Digital Camera</th>
<th>Wheat (bushels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>42</td>
<td>1,200</td>
</tr>
<tr>
<td>South Korea</td>
<td>48</td>
<td>1,800</td>
</tr>
</tbody>
</table>

h. See graph in part (a)

i. Yes, trade has enabled the two countries to consume outside their PPFs.

39. Suppose in the United States, the opportunity cost of producing a motor engine is 4 auto bodies. In Canada, the opportunity cost of producing a motor engine is 2 auto bodies.

a. What is the opportunity cost of producing an auto body for the United States?

b. What is the opportunity cost of producing an auto body for Canada?

c. Which country has a comparative advantage in the production of auto bodies?

d. Which country has a comparative advantage in the production of motor engines?

Answer: a. For the United States, the opportunity cost of producing an auto body is 1/4 of a motor engine.

b. For Canada, the opportunity cost of producing an auto body is 1/2 of a motor engine.

c. The United States has a comparative advantage in the production of auto bodies.

d. Canada has a comparative advantage in the production of motor engines.

2.3 The Market System
1. Which of the following is not a factor of production?
   A) an acre of farmland
   B) a drill press in a machine shop
   C) the manager of the local tire shop
   D) $1,000 in cash
   Answer: D
   Diff: 2 Type: MC Page Ref: 50/50
   Topic: The Market System
   Skill: Conceptual
   Objective: LO 3: Explain the basic idea of how a market system works
   AACSB Coding: Reflective Thinking
   Special Feature: None

2. An example of a factor of production is
   A) a car produced by an auto manufacturer.
   B) a worker hired by an auto manufacturer.
   C) a loan granted to an auto manufacturer.
   D) the automobiles exported by an auto manufacturer.
   Answer: B
   Diff: 2 Type: MC Page Ref: 50/50
   Topic: The Market System
   Skill: Conceptual
   Objective: LO 3: Explain the basic idea of how a market system works
   AACSB Coding: Reflective Thinking
   Special Feature: None

3. If a commercial dairy farm wants to raise funds to purchase feeding troughs, it does so in the
   A) output market.
   B) product market.
   C) factor market.
   D) dairy products market.
   Answer: C
   Diff: 1 Type: MC Page Ref: 50/50
   Topic: The Market System
   Skill: Conceptual
   Objective: LO 3: Explain the basic idea of how a market system works
   AACSB Coding: Reflective Thinking
   Special Feature: None

4. A worker is hired in a
   A) goods and services market.
   B) product market.
   C) government market.
   D) factor market.
Chapter 2: Trade-offs, Comparative Advantage, and the Market System

5. When you purchase a new pair of jeans you do so in the A) factor market. B) input market C) product market D) resource market
Answer: C

6. The resource income earned by those who supply labor services is called A) wages and salaries. B) stock options. C) profit. D) bonus.
Answer: A

7. Which of the following statements is false about an entrepreneur? A) organizes the other factors of production into a working unit. B) develops the vision for the firm and funds the producing unit. C) sells his entrepreneurial services in the output market. D) risks the personal funds provided. Answer: C
Objective: LO 3: Explain the basic idea of how a market system works
AACSB Coding: Reflective Thinking
Special Feature: None

8. The circular flow model demonstrates
   A) the role of the government in overseeing the market system.
   B) the roles played by households and firms in the market system.
   C) how shortages and surpluses are eliminated in a market.
   D) how demand and supply for goods and services are brought into equilibrium.
Answer: B

9. Households
   A) have no influence on the circular flow in a market economy.
   B) purchase resources in the factor market.
   C) sell goods in the product market.
   D) sell resources in the factor market.
Answer: D

10. Households
    A) purchase final goods and services in the factor market.
    B) purchase final goods and services in the product market.
    C) purchase resources in the product market.
    D) purchase resources in the factor market.
Answer: B
11. In the circular flow model, producers
   A) sell goods and services in the input market.
   B) households spend earnings from resource sales on goods and services in the factor market.
   C) hire resources sold by households in the factor market.
   D) spend earnings from resource sales on goods and services in the product market.
   Answer: C

12. Which of the following is not a flow in the circular flow model?
   A) the flow of goods and services and the flow of resources to produce goods and services
   B) the flow of profit and the flow of revenue
   C) the flow of income earned by households and the flow of expenditures incurred by households
   D) the flow of revenue received by producers and the flow of payments to resource owners
   Answer: B

Figure 2-8
13. Refer to Figure 2-8. The segment of the circular flow diagram in the Figure shows the flow of labor services from market $K$ to economic agents $J$. What is market $K$ and who are economic agents $J$?

A) $K$ = factor markets; $J$ = households  
B) $K$ = product markets; $J$ = households  
C) $K$ = factor markets; $J$ = firms  
D) $K$ = product markets; $J$ = firms

Answer: C

Diff: 2 Type: MC Page Ref: 50-1/50-1
Topic: The Market System
Skill: Conceptual
Objective: LO 3: Explain the basic idea of how a market system works
AACSB Coding: Reflective Thinking
Special Feature: None

14. Refer to Figure 2-8. The segment of the circular flow diagram in the Figure shows the flow of wages and salaries from market $K$ to economic agents $M$. What is market $K$ and who are economic agents $M$?

A) $K$ = factor markets; $M$ = households  
B) $K$ = product markets; $M$ = households  
C) $K$ = factor markets; $M$ = firms  
D) $K$ = product markets; $M$ = firms

Answer: A

Diff: 2 Type: MC Page Ref: 50-1/50-1
Topic: The Market System
Skill: Conceptual
Objective: LO 3: Explain the basic idea of how a market system works
AACSB Coding: Reflective Thinking
Special Feature: None
15. Which of the following are flows in the circular flow model?
   A) the flow of goods and the flow of services
   B) the flow of costs and the flow of revenue
   C) the flow of income earned from the sale of resources and the flow of expenditures on goods and services.
   D) the flow of income received by households and the flow of tax revenues paid by households
   Answer: C
   Diff: 2   Type: MC   Page Ref: 50-1/50-1
   Topic: The Market System
   Skill: Conceptual
   Objective: LO 3: Explain the basic idea of how a market system works
   AACSB Coding: Reflective Thinking
   Special Feature: None

16. Which of the following statements is true about a simple circular flow model?
   A) Producers are neither buyers nor sellers in the product market.
   B) Households are neither buyers nor sellers in the input market.
   C) Producers are buyers in the factors market.
   D) Households are sellers in the product market.
   Answer: C
   Diff: 2   Type: MC   Page Ref: 50-1/50-1
   Topic: The Market System
   Skill: Conceptual
   Objective: LO 3: Explain the basic idea of how a market system works
   AACSB Coding: Reflective Thinking
   Special Feature: None
17. Refer to Figure 2-9. The segment of the circular flow diagram in the Figure shows the flow of goods and services from market C to economic agents A. What is market C and who are economic agents A?

A) C = factor markets; A = households
B) C = product markets; A = households
C) C = factor markets; A = firms
D) C = product markets; A = firms

Answer: B

Diff: 2   Type: MC   Page Ref: 50-1/50-1
Topic: The Market System
Skill: Conceptual
Objective: LO 3: Explain the basic idea of how a market system works
AACSB Coding: Reflective Thinking
Special Feature: None
18. Refer to Figure 2-10. The segment of the circular flow diagram in the Figure shows the flow of funds from market \( F \) to economic agents \( G \). The funds represent spending on goods and services. What is market \( K \) and who are economic agents \( G \)?

   A) \( F = \) factor markets; \( G = \) households  
   B) \( F = \) product markets; \( G = \) households  
   C) \( F = \) factor markets; \( G = \) firms  
   D) \( F = \) product markets; \( G = \) firms

Answer: D

19. All of the following are examples of spending on factors of production in the circular flow model except

   A) Bima hires two students to work at his ice-cream store.  
   B) "Get Fit Together" purchases 3 new treadmills for its gym.  
   C) Iris buys a dozen roses for her mother’s birthday.
D) The Banyan Tree rents a much larger property so that it can add a restaurant to its facilities.
Answer: C

20. All of the following are examples of spending on goods and services in the circular flow model except
A) Amanda purchases a new electric guitar to pursue her hobby seriously.
B) Chaitanya buys a new spa pedicure chair for her expanding nail salon business.
C) Hernan buys a pizza at Papa C's.
D) Lenny buys a new digital camera to take pictures at his son’s graduation.
Answer: B

A) John Maynard Keynes
B) Karl Marx
C) Alfred Marshall
D) Adam Smith
Answer: D
22. Refer to Figure 2-11. Which two arrows in the diagram depict the following transaction:
   Stanley purchases the novel, "Night of Sorrows" for his summer reading pleasure.
   A) $J$ and $M$
   B) $J$ and $G$
   C) $K$ and $M$
   D) $K$ and $G$
   Answer: D
   Diff: 2   Type: MC   Page Ref: 50-1/50-1
   Topic: The Market System
   Skill: Conceptual
   Objective: LO 3: Explain the basic idea of how a market system works
   AACSB Coding: Reflective Thinking
   Special Feature: None

23. Refer to Figure 2-11. Which two arrows in the diagram depict the following transaction:
Answer: B
Diff: 2 Type: MC Page Ref: 50-1/50-1
Topic: The Market System
Skill: Conceptual
Objective: LO 3: Explain the basic idea of how a market system works
AACSB Coding: Reflective Thinking
Special Feature: None

Refer to Figure 2. Which two arrows in the diagram depict the following transaction: Carter earns a $400 commission for selling men's designer shoes at Brooks Brothers.

A) J and M B) K and G C) K and M D) J and G
Answer: A
Diff: 2 Type: MC Page Ref: 50-1/50-1
Topic: The Market System
Skill: Conceptual
Objective: LO 3: Explain the basic idea of how a market system works
AACSB Coding: Reflective Thinking
Special Feature: None

25. Adam Smith's behavioral assumption about humans was that people
A) typically act irrationally.
B) usually act in a rational, self-interested way.
C) are consistently greedy.
D) typically act randomly.
Answer: B
Diff: 1 Type: MC Page Ref: 52/52
Topic: The Market System
Skill: Conceptual
Objective: LO 3: Explain the basic idea of how a market system works
AACSB Coding: Reflective Thinking
Special Feature: None
26. Which of the following countries does not come close to the free market benchmark?  
   A) The United States  
   B) Japan  
   C) Cuba  
   D) France  
   Answer: C  
   Diff: 1  Type: MC  Page Ref: 52/52  
   Topic: The Market System  
   Skill: Factual  
   Objective: LO 3: Explain the basic idea of how a market system works  
   AACSB Coding: Reflective Thinking  
   Special Feature: None  

27. Adam Smith’s invisible hand refers to  
   A) the government's unobtrusive role in ensuring that the economy functions efficiently.  
   B) property ownership laws and the rule of the court system.  
   C) the process by which individuals acting in their own self-interest bring about a market outcome that benefits society as a whole.  
   D) the laws of nature that influence economics decisions.  
   Answer: C  
   Diff: 2  Type: MC  Page Ref: 52/52  
   Topic: The Market System  
   Skill: Conceptual  
   Objective: LO 3: Explain the basic idea of how a market system works  
   AACSB Coding: Reflective Thinking  
   Special Feature: None  

28. A critical function of the government in facilitating the operation of a market economy is  
   A) producing goods and services for low income households.  
   B) setting up and enforcing private property rights.  
   C) ensuring an equal distribution of income to all citizens.  
   D) controlling the market prices of food items.  
   Answer: B  
   Diff: 2  Type: MC  Page Ref: 54/54  
   Topic: The Market System  
   Skill: Conceptual  
   Objective: LO 3: Explain the basic idea of how a market system works  
   AACSB Coding: Reflective Thinking  
   Special Feature: None
29. The term “property rights” refers to  
   A) the physical possession of a house or any other property which the owner legally purchased.  
   B) the ability to exercise control over one’s own resources within the confines of the law.  
   C) the government's right to appropriate land from wealthy land owners to redistribute to peasants  
   D) the right of a business not to have its assets confiscated by the government in the event that the business is accused of committing fraud.  Answer: B  
   Diff: 1  Type: MC  Page Ref: 54/54  
   Topic: The Market System  
   Skill: Definition  
   Objective: LO 3: Explain the basic idea of how a market system works  
   AACSB Coding: Reflective Thinking  
   Special Feature: None  

30. The primary purpose of patents and copyrights is to  
   A) provide owners with large profit forever.  
   B) protect firms from being taken advantage of by competing firms.  
   C) protect domestic firms from foreign competition.  
   D) encourage the expenditure of funds on research and development to create new products.  
   Answer: D  
   Diff: 1  Type: MC  Page Ref: 54/54  
   Topic: The Market System  
   Skill: Conceptual  
   Objective: LO 3: Explain the basic idea of how a market system works  
   AACSB Coding: Reflective Thinking  
   Special Feature: None  

31. A major factor contributing to the slow growth rate of less developed economies is  
   A) the lack of well-defined and enforceable property rights.  
   B) the lack of natural resources.  
   C) the lack of workers.  
   D) the high rate of illiteracy.  
   Answer: A  
   Diff: 2  Type: MC  Page Ref: 54/54  
   Topic: The Market System  
   Skill: Factual  
   Objective: LO 3: Explain the basic idea of how a market system works  
   AACSB Coding: Reflective Thinking  
   Special Feature: None  

32. A successful market economy requires well defined property rights and  
   A) balanced supplies of all factors of production.  
   B) an independent court system to adjudicate disputes based on the law.
C) detailed government regulations.
D) a safety net to ensure that those who cannot participate in the market economy can earn an income.

Answer: B

33. Consider the following items:
   a. the novel "The DaVinci Code" by Dan Brown
   b. the "The Spirited Shipper", an innovative wine shipping box
   c. a Swiss chef’s award-winning recipe
   d. an original fabric design for example, the fabric used for “Coach” bags and luggage.

Which of the items listed is an example of intellectual property?
   A) a and b only
   B) a, b, and c
   C) a and d only
   D) all of the items listed

Answer: D

34. A guild is
   A) a group of independent producers competing with each other.
   B) an organization of producers that limits the amount of a good produced.
   C) a group of nations who agree not to compete with each other.
   D) a nation that is a free market benchmark.

Answer: B
35. In 18th century Europe, governments gave guilds legal authority to limit production of goods. Did this authority obstruct or improve the market mechanism and how?

A) It improved the market mechanism by making it more efficient because the guilds were able to quickly identify and rectify any market shortages and surpluses.

B) It improved the market mechanism because the government's actions provided the correct set of signals to the market so that producers can adjust their output to better meet the needs of consumers.

C) It obstructed the market mechanism because the guild's actions prevented the forces of demand and supply from coordinating the self-interested decisions of producers and consumers.

D) It obstructed the market mechanism because with one more party having to coordinate activities (the guilds) there were delays in getting the products to consumers.

Answer: C

36. The payment received by suppliers of entrepreneurial skills is called profit.

Answer: True

Diff: 1  Type: TF  Page Ref: 50/50
Topic: The Market System
Skill: Conceptual
Objective: LO 3: Explain the basic idea of how a market system works
AACSB Coding: Reflective Thinking
Special Feature: None
134. In the circular flow model, households supply resources such as labor services in the product market.
   Answer: True   False
   Diff: 1   Type: TF   Page Ref: 51/51
   Topic: The Market System
   Skill: Conceptual
   Objective: LO 3: Explain the basic idea of how a market system works
   AACSB Coding: Reflective Thinking
   Special Feature: None

37. In economics, the term "free market" refers to a market where no sales tax is imposed on products sold.
   Answer: True   False
   Diff: 1   Type: TF   Page Ref: 52/52
   Topic: The Market System
   Skill: Conceptual
   Objective: LO 3: Explain the basic idea of how a market system works
   AACSB Coding: Reflective Thinking
   Special Feature: None

38. In a free market there are virtually no restrictions, or at best few restrictions on how factors of production can be employed.
   Answer: True   False
   Diff: 1   Type: TF   Page Ref: 52/52
   Topic: The Market System
   Skill: Conceptual
   Objective: LO 3: Explain the basic idea of how a market system works
   AACSB Coding: Reflective Thinking
   Special Feature: None

39. A stand of redwood trees is not an example of a factor of production but the harvested and processed redwood is a factor of production.
   Answer: True   False
   Diff: 2   Type: TF   Page Ref: 50/50
   Topic: The Market System
   Skill: Conceptual
   Objective: LO 3: Explain the basic idea of how a market system works
   AACSB Coding: Reflective Thinking
   Special Feature: None

40. Each person goes about her daily business seeking to maximize her own self interests. In doing so, she contributes to the welfare of society at large. This is the idea underlying Adam Smith's "invisible hand".
41. Define the term "property rights". Explain why the lack of well defined and enforceable property rights is detrimental to the smooth functioning of a market system.

Answer: The term "property rights" refers to the rights that individuals or firms have to the exclusive use of their resources, within the confines of the law. Well defined and enforceable property rights provide the incentive for people and firms to invest resources and undertake risks. This encourages the production of a wide range of goods and services. Without property rights and the means to enforce these rights, no person would want to undertake such a risk.

42. When videos on YouTube contained material from television shows or movies, YouTube had to obtain permission from several people who held rights to the television show or movie, which could be a time consuming process. YouTube's vice president for business development was quoted as saying, "It's almost like technology has pushed far beyond the business practices and the law, and now everything needs to kind of catch up." What do you think he meant by that statement?

Answer: His statement alludes to the fact that the nature of internet technology requires society to change the legal understanding or status of copyright as it stands and to re-examine the payment mechanism.

43. Adam Smith, the father of modern economics wrote in his book, *An Inquiry into the Nature and Causes of the Wealth of Nations*, "It is not from the benevolence of the butcher, the brewer,
or the baker, that we expect our dinner but from their regard to their own interest.” Explain what he meant by that statement and how such behavior promotes the wealth of a nation.

Answer: The statements refer to the fact that people act in their own self interest. For example, the butcher who sells meat and the baker who bakes bread carry out these activities because these tasks contributed to their livelihood, not because they were concerned about the diner. Nevertheless, their actions benefited the diner. This is precisely one of the virtues of a market: people do not have to act virtuously to produce worthwhile outcomes. Producing goods and services that consumers value increases the wealth of a nation.

Diff: 3 Type: SA Page Ref: 53/53
Topic: The Market System
Skill: Analytical
Objective: LO 3: Explain the basic idea of how a market system works
AACSB Coding: Analytic Skills
Special Feature: Making the Connection: A Story of the Marketing System in Action: How do You Make an iPod?