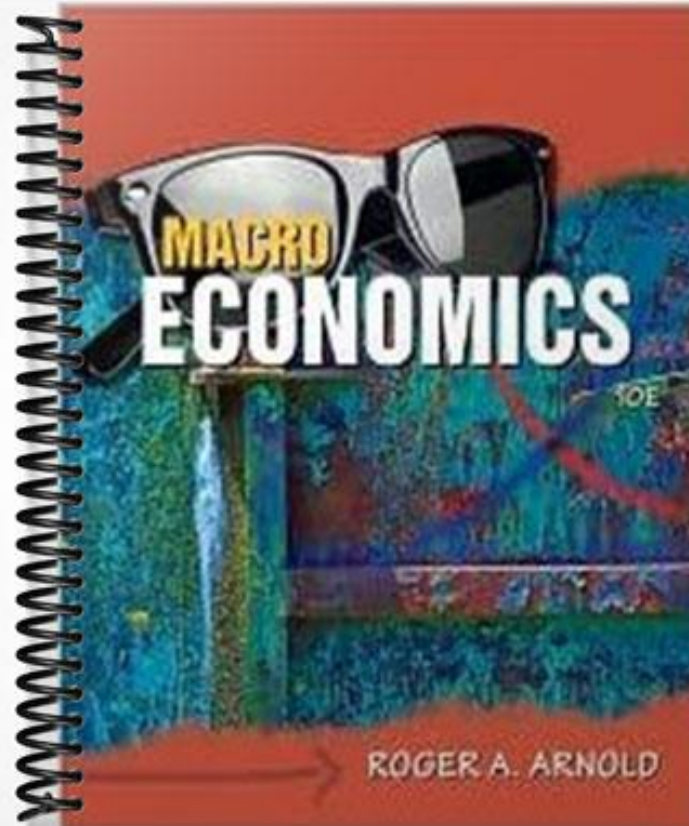


**TEST BANK**



## Chapter 2—Production Possibilities Frontier Framework

### MULTIPLE CHOICE

1. Points outside (or beyond) the PPF are
  - a. attainable.
  - b. unattainable.
  - c. efficient.
  - d. inefficient.

ANS: B                      PTS: 1                      DIF: Easy                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

2. Which of the following statements is true?
  - a. In a world of efficiently used scarce resources, more of one good necessarily means less of some other good.
  - b. The law of increasing opportunity costs assumes that all people have the same ability to produce goods.
  - c. Efficiency implies that it is impossible to get more of one good without getting less of another.
  - d. Even if a country has unemployed resources, it can still be operating on its production possibilities frontier (PPF).
  - e. a and c

ANS: E                      PTS: 1                      DIF: Difficult                      NAT: Analytic  
LOC: Efficiency and equity

3. Through war, many of the factories in country 1 are destroyed and many of its people are killed. As a result, the country's
  - a. production possibilities frontier (PPF) after the war has probably shifted to the right compared to its PPF prior to the war.
  - b. PPF after the war has probably shifted to the left compared to its PPF prior to the war.
  - c. PPF after the war is probably the same PPF as before the war.
  - d. ability to produce goods and services has increased.
  - e. b and d

ANS: B                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

4. The economy moves from point A, where it produces 100X and 200Y, to point B, where it produces 200X and 150Y. It follows that
  - a. point A is an inefficient point.
  - b. point A may be an inefficient point.
  - c. point A may be an efficient point.
  - d. point B is an efficient point.
  - e. b and c

ANS: E                      PTS: 1                      DIF: Difficult                      NAT: Analytic  
LOC: Efficiency and equity

5. Both country 1 and country 2 are located on their respective production possibilities frontiers (PPFs), but country 1 produces twice the output that country 2 produces. It follows that
  - a. country 1's PPF lies further to the right than country 2's PPF.

- b. country 1 has a smaller population than country 2.
- c. country 1 has a bigger population than country 2.
- d. country 1 is efficient and country 2 is inefficient.
- e. none of the above

ANS: A                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

6. If there is always a three-for-one tradeoff between goods X and Y, then the PPF between X and Y is
- a. a downward-sloping curve that is bowed outward.
  - b. a downward-sloping curve that is bowed inward.
  - c. a downward-sloping straight line.
  - d. an upward-sloping straight line.

ANS: C                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

7. Points inside (or below) the PPF are
- a. unattainable.
  - b. attainable and efficient.
  - c. attainable but inefficient.
  - d. attainable and neither efficient nor inefficient.

ANS: C                    PTS: 1                    DIF: Easy                NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

8. If increasingly more units of good Y must be given up as each successive unit of good X is produced, then the PPF for these two goods is
- a. a downward-sloping straight line.
  - b. circular.
  - c. an upward-sloping curve.
  - d. a downward-sloping curve that is bowed outward.

ANS: D                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

9. Consider the following combinations of guns and butter that can be produced: 0 guns, 20,000 units of butter; 5,000 guns, 15,000 units of butter; 10,000 guns, 10,000 units of butter; 15,000 guns, 5,000 units of butter; 20,000 guns, 0 units of butter. The PPF between guns and butter is
- a. a downward-sloping bowed-out curve.
  - b. a downward-sloping straight line.
  - c. an upward-sloping straight line.
  - d. It is impossible to answer this question without knowing which good would be plotted on the vertical axis.

ANS: B                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

10. Which of the following statements is true?
- a. The concept of opportunity costs cannot be illustrated within a PPF framework.
  - b. If scarcity did not exist, neither would a PPF.
  - c. All PPFs are downward-sloping straight lines.
  - d. There are more attainable points than unattainable points in every PPF diagram.

ANS: B                    PTS: 1                    DIF: Moderate           NAT: Analytic

LOC: Scarcity, tradeoffs, and opportunity cost

11. A PPF can
- shift outward but not inward.
  - shift inward but not outward.
  - shift inward or outward.
  - shift neither inward nor outward.

ANS: C                      PTS: 1                      DIF: Moderate                      NAT: Analytic

LOC: Scarcity, tradeoffs, and opportunity cost

12. Consider two points on the PPF: point A, at which there are 10 apples and 20 pears, and point B, at which there are 7 apples and 21 pears. If the economy is currently at point A, the opportunity cost of moving to point B is
- 1 pear.
  - 7 apples.
  - 3 apples.
  - 21 pears.

ANS: C                      PTS: 1                      DIF: Moderate                      NAT: Analytic

LOC: Scarcity, tradeoffs, and opportunity cost

13. Consider two points on the PPF: point A, at which there are 50 oranges and 100 apricots, and point B, at which there are 51 oranges and 98 apricots. If the economy is currently at point B, the opportunity cost of moving to point A is
- 2 apricots.
  - 1 orange.
  - 98 apricots.
  - 3 oranges.

ANS: B                      PTS: 1                      DIF: Moderate                      NAT: Analytic

LOC: Scarcity, tradeoffs, and opportunity cost

14. The point where the PPF intersects the vertical axis is
- unattainable.
  - attainable and efficient.
  - attainable but inefficient.
  - attainable and neither efficient nor inefficient.

ANS: B                      PTS: 1                      DIF: Moderate                      NAT: Analytic

LOC: Efficiency and equity

15. The point where the PPF intersects the horizontal axis is
- unattainable.
  - attainable and efficient.
  - attainable but inefficient.
  - attainable and neither efficient nor inefficient.

ANS: B                      PTS: 1                      DIF: Moderate                      NAT: Analytic

LOC: Efficiency and equity

16. Consider two straight-line PPFs. They have the same vertical intercept, but curve I is flatter than curve II. The opportunity cost of producing the good on the horizontal axis
- is greater along curve I.
  - is greater along curve II.

- c. is the same along both curves.
- d. cannot be compared for the two curves without more information.

ANS: B                    PTS: 1                    DIF: Difficult                    NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

17. Consider two straight-line PPFs. They have the same vertical intercept, but curve I is flatter than curve II. The opportunity cost of producing the good on the vertical axis
- a. is greater along curve I.
  - b. is greater along curve II.
  - c. is the same along both curves.
  - d. cannot be compared for the two curves without more information.

ANS: A                    PTS: 1                    DIF: Difficult                    NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

18. Suppose the economy goes from a point on its production possibilities frontier (PPF) to a point inside that PPF. Assuming that the PPF has not shifted, this could be due to
- a. a gain of resources.
  - b. a loss of resources.
  - c. technological improvement in the production of both goods.
  - d. a new law that interferes with economic efficiency.

ANS: D                    PTS: 1                    DIF: Moderate                    NAT: Analytic  
LOC: Efficiency and equity                    NOT: New

19. Suppose the economy goes from a point on its production possibilities frontier (PPF) to a point inside that PPF. Assuming that the PPF has not shifted, this could be due to
- a. a gain of resources.
  - b. a loss of resources.
  - c. technological improvement in the production of both goods.
  - d. an increase in unemployment of some resources.

ANS: D                    PTS: 1                    DIF: Moderate                    NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

20. An increase in the quantity of resources
- a. shifts the PPF inward.
  - b. shifts the PPF outward.
  - c. moves the economy to a new point up along a given PPF.
  - d. moves the economy to a new point down along a given PPF.

ANS: B                    PTS: 1                    DIF: Easy                    NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

21. A decrease in the quantity of resources
- a. shifts the PPF inward.
  - b. shifts the PPF outward.
  - c. moves the economy up a given PPF.
  - d. moves the economy down a given PPF.

ANS: A                    PTS: 1                    DIF: Easy                    NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

22. The increased production of lamps comes at constant opportunity costs in terms of bookshelves. This means
- that it takes more resources to produce a lamp than a bookshelf.
  - that it takes fewer resources to produce a lamp than a bookshelf.
  - that for every lamp produced, a constant number of bookshelves is forfeited.
  - that for every lamp produced, a different number of bookshelves is forfeited.

ANS: C                    PTS: 1                    DIF: Moderate           NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

23. Which of the following is an illustration of the law of increasing opportunity costs?
- As more cars are produced, the opportunity cost of each additional car is greater than for the preceding unit.
  - As more cars are produced, the opportunity cost of each additional car is less than for the preceding unit.
  - As more cars are produced, the opportunity cost of each additional car is the same as for the preceding unit.
  - People pay lower prices for cars the higher the costs of producing cars.

ANS: A                    PTS: 1                    DIF: Moderate           NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

24. The PPF between goods X and Y will be a downward-sloping
- straight line if increasing opportunity costs exist.
  - straight line if decreasing opportunity costs exist.
  - curve that is bowed outward if increasing opportunity costs exist.
  - curve that is bowed outward if constant opportunity costs exist.

ANS: C                    PTS: 1                    DIF: Difficult           NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

25. A PPF is more likely to be a downward-sloping curve that is bowed outward than a downward-sloping straight line because most resources are
- better suited for the production of some goods than others.
  - used efficiently.
  - relatively cheap at low levels of output.
  - used to produce consumption goods.

ANS: A                    PTS: 1                    DIF: Moderate           NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

26. Economic growth causes the PPF to
- shift inward.
  - shift outward.
  - remain constant.
  - go from a straight line to a curve.

ANS: B                    PTS: 1                    DIF: Easy                NAT: Analytic  
LOC: Productivity and growth

27. Which of the following statements is *false*?
- If there are only two goods, guns and butter, it is possible to produce more of both goods through economic growth.
  - If there are only two goods, guns and butter, it is possible to produce more of both goods if the economy is currently operating at an inefficient point.

- c. If there are only two goods, guns and butter, it is possible to produce more of both goods if the economy is currently operating at an efficient point.
- d. If there are only two goods, guns and butter, producing more of one means producing less of the other if the economy is currently operating at an efficient point.

ANS: C                    PTS: 1                    DIF: Moderate                    NAT: Analytic  
 LOC: Efficiency and equity

28. An economy exhibits *productive efficiency* if it produces
- a. more than enough food to feed everyone.
  - b. more goods and services in each successive year.
  - c. maximum output with given resources and technology.
  - d. enough output so that no one lives in poverty.

ANS: C                    PTS: 1                    DIF: Easy                    NAT: Analytic  
 LOC: Efficiency and equity

29. If it is impossible to produce more of one good without getting less of another, then the economy is operating
- a. efficiently.
  - b. at less than peak performance.
  - c. inefficiently.
  - d. at technological inferiority.

ANS: A                    PTS: 1                    DIF: Easy                    NAT: Analytic  
 LOC: Efficiency and equity

30. Which of the following statements is true?
- a. Productive inefficiency implies that it is possible to produce more of one good and no less of another, but only if additional resources are made available.
  - b. Productive efficiency implies that it is possible to produce more of one good and no less of another, even without additional resources.
  - c. Productive inefficiency implies that it is impossible to produce more of one good and no less of another.
  - d. Productive inefficiency implies that it is possible to produce more of one good and no less of another, even without additional resources.

ANS: D                    PTS: 1                    DIF: Moderate                    NAT: Analytic  
 LOC: Efficiency and equity

31. Productive inefficiency implies that
- a. it is possible to obtain gains in one area without losses in another.
  - b. it is impossible to obtain gains in one area without losses in another.
  - c. there are too many resources.
  - d. there are too few resources.
  - e. none of the above

ANS: A                    PTS: 1                    DIF: Easy                    NAT: Analytic  
 LOC: Efficiency and equity

32. Productive efficiency implies that
- a. it is impossible to obtain gains in one area without losses in another.
  - b. it is possible to obtain gains in one area without losses in another.
  - c. there are too many resources.
  - d. there are too few resources.

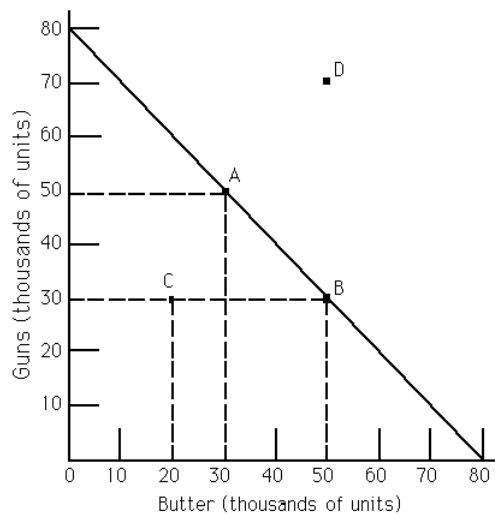
e. none of the above

ANS: A                    PTS: 1                    DIF: Easy                    NAT: Analytic  
LOC: Efficiency and equity

33. Suppose the economy goes from a point on its production possibilities frontier (PPF) to a point directly to the left of it. Assuming that the PPF has not shifted, this could be due to
- a gain of resources.
  - a loss of resources.
  - technological improvement in the production of both goods.
  - a new law that interferes with productive efficiency.

ANS: D                    PTS: 1                    DIF: Easy                    NAT: Analytic  
LOC: Efficiency and equity

**Exhibit 2-1**



34. Refer to Exhibit 2-1. The PPF illustrates
- constant opportunity costs between guns and butter.
  - that guns are more important than butter.
  - increasing opportunity costs between guns and butter.
  - the opportunity cost of one unit of guns is four units of butter.
  - none of the above

ANS: A                    PTS: 1                    DIF: Easy                    NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

35. Refer to Exhibit 2-1. The movement from point A to point B is a movement from
- a productive efficient point to a productive inefficient point.
  - a point with more guns and less butter to a point with more butter and even more guns.
  - a productive efficient point to another productive efficient point.
  - a productive inefficient point to an productive efficient point.

ANS: C                    PTS: 1                    DIF: Easy                    NAT: Analytic  
LOC: Efficiency and equity

36. Refer to Exhibit 2-1. A movement from point B to point D
- could only happen through economic growth.



- b. is necessarily a movement from a productive efficient point to a productive inefficient point.
- c. is a movement from a productive efficient point to another productive efficient point.
- d. is necessarily a movement from a productive inefficient point to another productive inefficient point.

ANS: A                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost                    NOT: New

37. Refer to Exhibit 2-1. If the economy is at point C, it follows that
- a. more guns and butter can be produced with available resources.
  - b. only more guns can be produced with available resources.
  - c. only more butter can be produced with available resources.
  - d. C is an unattainable point.

ANS: A                    PTS: 1                    DIF: Easy                    NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

38. Refer to Exhibit 2-1. The opportunity cost of moving from point B to A is
- a. 10,000 units of butter.
  - b. 20,000 units of butter.
  - c. 50,000 units of guns.
  - d. the maximum amount of butter that can be produced with available resources.

ANS: B                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

39. Refer to Exhibit 2-1. Scarcity exists
- a. at point C but not at point A.
  - b. neither at point C nor at point A.
  - c. at both point C and at point A.
  - d. at point A but not at point C.

ANS: C                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

40. In the United States, farming today is \_\_\_\_\_ productive compared to a century ago, resulting in there being \_\_\_\_\_ farmers today than at the turn of the previous century.
- a. about as; fewer
  - b. about as; more
  - c. much more; fewer
  - d. much more; more

ANS: C                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Productivity and growth

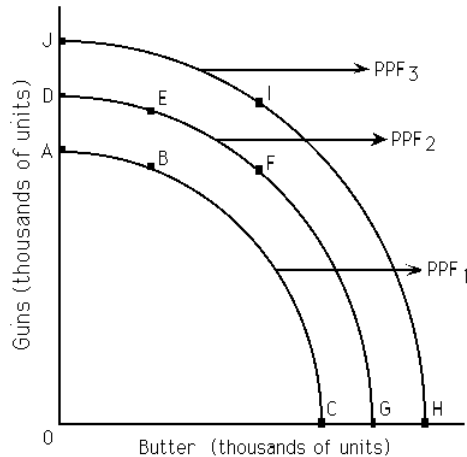
41. Technological \_\_\_\_\_ in American agriculture has \_\_\_\_\_ other types of employment.
- a. improvement; drawn labor away from
  - b. improvement; released labor to go to
  - c. stagnation; drawn labor away from
  - d. stagnation; released labor to go to

ANS: B                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Productivity and growth

42. In the production possibilities framework, economic growth is depicted by the PPF
- shifting leftward (toward the origin).
  - shifting rightward (away from the origin).
  - becoming a straight line.
  - becoming bowed outward.

ANS: B                      PTS: 1                      DIF: Easy                      NAT: Analytic  
 LOC: Productivity and growth                      NOT: New

**Exhibit 2-2**



43. Refer to Exhibit 2-2. If PPF<sub>2</sub> is the relevant production possibilities frontier, then point \_\_\_\_\_ illustrates productive inefficiency.
- A
  - D
  - F
  - J

ANS: A                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
 LOC: Efficiency and equity

44. Refer to Exhibit 2-2. If PPF<sub>2</sub> is the relevant production possibilities frontier, then point \_\_\_\_\_ is unattainable.
- A
  - G
  - D
  - J

ANS: D                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

45. Refer to Exhibit 2-2. If PPF<sub>2</sub> is the relevant production possibilities frontier, then point \_\_\_\_\_ illustrates productive efficiency.
- B
  - D
  - I
  - F
  - both b and c

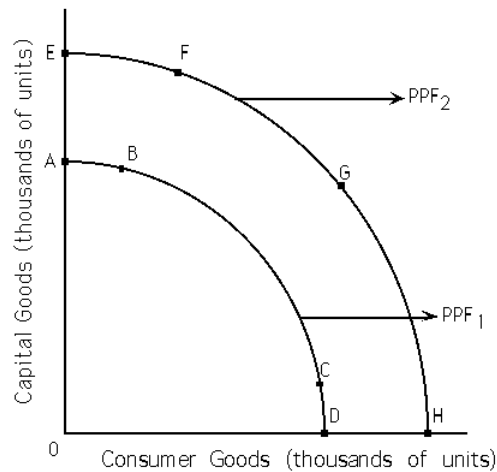
ANS: E                      PTS: 1                      DIF: Moderate                      NAT: Analytic

LOC: Efficiency and equity

46. Refer to Exhibit 2-2. If PPF<sub>2</sub> is the relevant production possibilities frontier, a significant loss of resources will
- move this society from point D to point G on PPF<sub>2</sub>.
  - move this society to PPF<sub>1</sub>.
  - move this society to PPF<sub>3</sub>.
  - not affect this society.

ANS: B                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

**Exhibit 2-3**



47. Refer to Exhibit 2-3. If PPF<sub>1</sub> is the relevant production possibilities frontier, society may move to PPF<sub>2</sub> as a result of
- an increase in resources.
  - a decrease in resources.
  - an increase in technology.
  - both a and c
  - both b and c

ANS: D                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Productivity and growth

48. Refer to Exhibit 2-3. If PPF<sub>1</sub> is the relevant production possibilities frontier, society can choose points that lie only
- below PPF<sub>1</sub>.
  - below or on PPF<sub>1</sub>.
  - on PPF<sub>2</sub>.
  - none of the above

ANS: B                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

49. Refer to Exhibit 2-3. If PPF<sub>1</sub> is the relevant production possibilities frontier, PPF<sub>2</sub> may depict
- economic growth.
  - an increase in resources.
  - an increase in technology.

- d. both b and c
- e. all of the above

ANS: E                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Productivity and growth

50. An efficient society
- a. produces at a point on its PPF.
  - b. can produce more of one good only by giving up some of an other good.
  - c. cannot produce unlimited amounts of a good.
  - d. still has to make choices.
  - e. all of the above

ANS: E                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Efficiency and equity

51. If resources are better suited toward the production of one good than toward the other good, then the PPF for those two goods is
- a. a straight line.
  - b. bowed outward.
  - c. upward sloping.
  - d. any of the above

ANS: B                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost                      NOT: New

52. A society is *productive inefficient* when
- a. it produces at a point inside or below its PPF.
  - b. it does not produce the maximum output with its given resources and technology.
  - c. it can produce more of one good without giving up some of another good.
  - d. both a and b
  - e. all of the above

ANS: E                      PTS: 1                      DIF: Difficult                      NAT: Analytic  
LOC: Efficiency and equity

53. With a constant opportunity cost between goods A and B, the PPF would
- a. be a straight line.
  - b. be a bowed-outward line.
  - c. be a bowed-inward line.
  - d. not exist.

ANS: A                      PTS: 1                      DIF: Easy                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

54. Within the production possibilities frontier (PPF) framework, choice is depicted by the
- a. PPF itself.
  - b. PPF being bowed outward.
  - c. need to select among the points making up the PPF.
  - d. straight-line PPF.

ANS: C                      PTS: 1                      DIF: Easy                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

55. If there is an increase in the amount of good B foregone as every additional unit of good A is produced, the PPF between A and B would
- be a straight line.
  - be a bowed-outward curve.
  - be a bowed-inward curve.
  - not exist.

ANS: B                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

56. The PPF is bowed outward as a result of
- constant opportunity costs.
  - increasing opportunity costs.
  - decreasing opportunity costs.
  - scarcity.
  - choice.

ANS: B                      PTS: 1                      DIF: Easy                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

57. The PPF is a straight line as a result of
- constant opportunity costs.
  - increasing opportunity costs.
  - decreasing opportunity costs.
  - scarcity.
  - choice.

ANS: A                      PTS: 1                      DIF: Easy                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

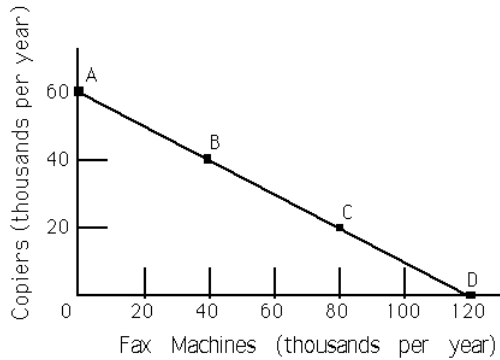
58. In an eight-hour day, Andy can produce either 24 loaves of bread or 8 pounds of butter. In an eight-hour day, John can produce either 8 loaves of bread or 8 pounds of butter. The opportunity cost of producing 1 pound of butter is
- $\frac{1}{3}$  hour for Andy and 1 hour for John.
  - 1 hour for Andy and 1 hour for John.
  - 3 loaves of bread for Andy and 1 loaf of bread for John.
  - $\frac{1}{3}$  loaves of bread for Andy and 1 loaf of bread for John.
  - none of the above

ANS: C                      PTS: 1                      DIF: Difficult                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

59. An advance in technology commonly refers to the ability to produce
- the same output with a smaller quantity of resources.
  - more output with a fixed quantity of resources.
  - more output with a greater quantity of resources.
  - both a and b
  - both b and c

ANS: D                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Productivity and growth

#### **Exhibit 2-4**



60. Refer to Exhibit 2-4. The line joining points A and D is called the
- production function.
  - utility function.
  - production possibilities frontier.
  - demand curve.

ANS: C                      PTS: 1                      DIF: Easy                      NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

61. Refer to Exhibit 2-4. This economy is
- efficient, if it operates at point B or C.
  - efficient, if it operates at point A or D.
  - inefficient, if it operates at point A or D.
  - inefficient regardless of the particular point.
  - both a and b

ANS: E                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
 LOC: Efficiency and equity

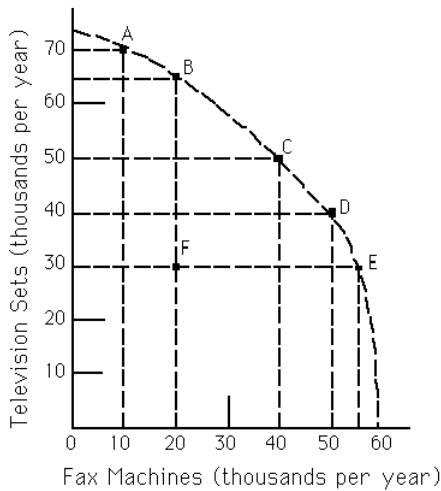
62. Refer to Exhibit 2-4. The opportunity cost of moving from point A to point B is
- 60,000 copiers.
  - 40,000 copiers.
  - 20,000 copiers.
  - 20,000 fax machines.
  - 40,000 fax machines.

ANS: C                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

63. Refer to Exhibit 2-4. As more fax machines are produced, the opportunity cost of producing them
- increases.
  - decreases.
  - remains constant.
  - first decreases and then increases.

ANS: C                      PTS: 1                      DIF: Easy                      NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

**Exhibit 2-5**



64. Refer to Exhibit 2-5. The economy is currently operating at point F. The opportunity cost of moving to point E is
- 35 fax machines.
  - 55 fax machines.
  - zero.
  - not possible to determine.

ANS: C                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

65. Refer to Exhibit 2-5. As more fax machines are produced, the opportunity cost of producing them
- increases.
  - decreases.
  - remains constant.
  - first decreases and then increases.

ANS: A                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

66. Refer to Exhibit 2-5. The opportunity cost of moving from point A to point B is
- 5,000 televisions.
  - 5,000 fax machines.
  - 10,000 televisions.
  - 10,000 fax machines.

ANS: A                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost                      NOT: New

67. Refer to Exhibit 2-5. The opportunity cost of moving from point D to point C is
- 5,000 televisions.
  - 5,000 fax machines.
  - 10,000 televisions.
  - 10,000 fax machines.

ANS: D                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost                      NOT: New

68. Refer to Exhibit 2-5. The opportunity cost of moving from point C to point B is

- a. 15,000 televisions.
- b. 15,000 fax machines.
- c. 10,000 televisions.
- d. 20,000 fax machines.

ANS: D                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost                    NOT: New

69. Refer to Exhibit 2-5. "In order to produce one more television set, we must forfeit the production of one fax machine." This statement describes a movement from
- a. point C to point D.
  - b. point D to point E.
  - c. point E to point F.
  - d. point E to point D.
  - e. point D to point C.

ANS: E                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

70. Refer to Exhibit 2-5. Which of the following labeled points are productive efficient?
- a. A, B, C, D, and E
  - b. B, C and D only
  - c. C only
  - d. All of the points are efficient.
  - e. None of the points are efficient.

ANS: A                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Efficiency and equity

71. Refer to Exhibit 2-5. Given available resources and technology, this economy can produce 50,000 television sets and 50,000 fax machines only if it chooses to
- a. have an equal distribution of goods.
  - b. operate at both points C and D.
  - c. combine points C and D.
  - d. none of the above

ANS: D                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

72. Some of our farm fields are being left unused. Does this have any implications for the economy's PPF diagram (with agricultural products on one axis and electronics products on the other axis)?
- a. No implications, because the PPF deals only with resources in use.
  - b. The PPF cannot be drawn if some resources are idle.
  - c. With unemployed resources, we are at a point inside the PPF.
  - d. The PPF would be upward sloping.

ANS: C                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

73. Productive efficiency implies that
- a. all consumers' wants are satisfied.
  - b. no advance in technology will occur in the future.
  - c. the attainable region is greater than the unattainable region.
  - d. gains are impossible in one area without losses in another.
  - e. all of the above



ANS: D                      PTS: 1                      DIF: Easy                      NAT: Analytic  
 LOC: Efficiency and equity

74. Jose has one evening in which to prepare for two exams and can employ two possible strategies:

| <u>Strategy</u> | <u>Score in Economics</u> | <u>Score in Statistics</u> |
|-----------------|---------------------------|----------------------------|
| A               | 94                        | 79                         |
| B               | 77                        | 90                         |

The opportunity cost of receiving a 94 on the Economics exam in terms of the number of points on the Statistics exam is

- a. 79.
- b. 17.
- c. 11.
- d. 90.

ANS: C                      PTS: 1                      DIF: Easy                      NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost                      MSC: Economics 24/7

75. Jose has one evening in which to prepare for two exams and can employ two possible strategies:

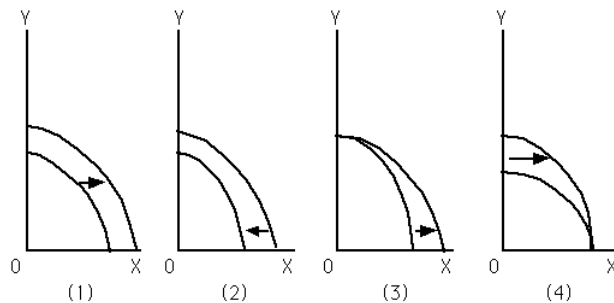
| <u>Strategy</u> | <u>Score in Economics</u> | <u>Score in Statistics</u> |
|-----------------|---------------------------|----------------------------|
| A               | 94                        | 79                         |
| B               | 77                        | 90                         |

The opportunity cost of receiving a 90 on the Statistics exam in terms of the number of points on the Economics exam is

- a. 79.
- b. 17.
- c. 11.
- d. 90.

ANS: B                      PTS: 1                      DIF: Easy                      NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost                      MSC: Economics 24/7

**Exhibit 2-6**



76. Refer to Exhibit 2-6. Which graph depicts a technological breakthrough in the production of good Y only?

- a. (1)
- b. (2)
- c. (3)
- d. (4)

e. none of the above

ANS: D                    PTS: 1                    DIF: Moderate           NAT: Analytic  
LOC: Productivity and growth

77. Refer to Exhibit 2-6. Which graph depicts a discovery of a new cheap source of energy that assists in the production of both good X and good Y?
- a. (1)
  - b. (2)
  - c. (3)
  - d. (4)
  - e. none of the above

ANS: A                    PTS: 1                    DIF: Moderate           NAT: Analytic  
LOC: Productivity and growth

78. Refer to Exhibit 2-6. Which graph best depicts the consequence of a large-scale natural disaster?
- a. (1)
  - b. (2)
  - c. (3)
  - d. (4)
  - e. none of the above

ANS: B                    PTS: 1                    DIF: Moderate           NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

79. Refer to Exhibit 2-6. Which graph depicts society's choice to produce more of good X?
- a. (1)
  - b. (2)
  - c. (3)
  - d. (4)
  - e. none of the above

ANS: E                    PTS: 1                    DIF: Moderate           NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

80. Refer to Exhibit 2-6. Which graph depicts a technological breakthrough in the production of good X only?
- a. (1)
  - b. (2)
  - c. (3)
  - d. (4)
  - e. none of the above

ANS: C                    PTS: 1                    DIF: Moderate           NAT: Analytic  
LOC: Productivity and growth

81. Refer to Exhibit 2-6. Which graph depicts the result of a decrease in the unemployment rate?
- a. (1)
  - b. (2)
  - c. (3)
  - d. (4)
  - e. none of the above

ANS: E                    PTS: 1                    DIF: Moderate           NAT: Analytic

LOC: Productivity and growth

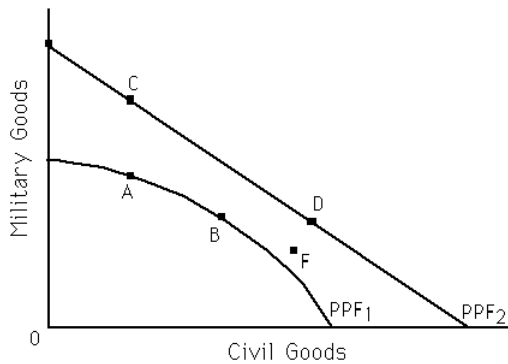
82. Refer to Exhibit 2-6. Which graph depicts the result of an increase in the number of illegal immigrants entering the country?
- (1)
  - (2)
  - (3)
  - (4)
  - none of the above

ANS: A                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Productivity and growth                      NOT: New

83. Refer to Exhibit 2-6. Which graph depicts the result of an increase in the unemployment rate?
- (1)
  - (2)
  - (3)
  - (4)
  - none of the above

ANS: E                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Productivity and growth

**Exhibit 2-7**



84. Refer to Exhibit 2-7. Which of the following statements is true?
- Points B and D are more efficient than points A and C.
  - If the economy's PPF is represented by PPF<sub>1</sub>, points A and B are efficient, while C and D are unattainable.
  - If the economy's PPF is represented by PPF<sub>2</sub>, points C and D are efficient, while A and B are unattainable.
  - both a and c

ANS: B                      PTS: 1                      DIF: Difficult                      NAT: Analytic  
LOC: Efficiency and equity

85. Refer to Exhibit 2-7. For which of the following is the statement "In order to get more civilian goods, we have to forfeit some military goods" true?
- a movement from A to C
  - a movement from B to D
  - a movement from C to D
  - a movement from F to D

e. none of the above

ANS: C                    PTS: 1                    DIF: Difficult                    NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

86. Refer to Exhibit 2-7. The change in the PPF of the economy from PPF<sub>1</sub> to PPF<sub>2</sub> corresponds to an advance in technology that makes
- resources completely unspecialized.
  - resources more specialized.
  - it possible to produce more of civilian goods only.
  - it possible to produce more military goods only.

ANS: A                    PTS: 1                    DIF: Difficult                    NAT: Analytic  
LOC: Productivity and growth

87. Refer to Exhibit 2-7. Point F is
- unattainable if the economy's PPF is PPF<sub>1</sub>.
  - inefficient if the economy's PPF is PPF<sub>2</sub>.
  - attainable if the economy's PPF is PPF<sub>2</sub>.
  - all of the above
  - none of the above

ANS: D                    PTS: 1                    DIF: Moderate                    NAT: Analytic  
LOC: Efficiency and equity

88. Refer to Exhibit 2-7. For which of the following is the statement “In order to get more military goods, we have to forfeit some civilian goods” true?
- a movement from A to C
  - a movement from B to D
  - a movement from F to D
  - a movement from B to A
  - none of the above

ANS: D                    PTS: 1                    DIF: Moderate                    NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

89. The economy can produce 15X and 15Y, 10X and 20Y, 5X and 25Y, or 0X and 30Y, or. It follows that the production possibility frontier (PPF) is
- a downward-sloping straight line.
  - an upward-sloping straight line.
  - a downward-sloping convex curve.
  - a downward-sloping concave curve.

ANS: A                    PTS: 1                    DIF: Moderate                    NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

90. If the economy is on the production possibilities frontier (PPF), the economy is operating
- inefficiently.
  - with no unemployed resources.
  - efficiently.
  - b and c
  - none of the above

ANS: D                    PTS: 1                    DIF: Easy                    NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

91. Points inside (below) the production possibilities frontier (PPF) are
- unattainable.
  - attainable, but inefficient.
  - preferable to points that lie on the PPF.
  - attainable and efficient.

ANS: B                      PTS: 1                      DIF: Easy                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost                      NOT: New

92. The economy can produce 15X and 15Y, 10X and 20Y, 5X and 25Y, or 0X and 30Y. It follows that opportunity cost of 1X is \_\_\_Y.
- 4.0
  - 5.0
  - 2.5
  - 1.0
  - none of the above

ANS: D                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

93. If an economy can produce a maximum of 100 units of good X and the opportunity cost of 1X is always 5Y, then what is the maximum units of good Y the economy can produce?
- 250
  - 100
  - 20
  - 500
  - none of the above

ANS: D                      PTS: 1                      DIF: Difficult                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

94. If an economy can produce a maximum of 10 units of good X and the opportunity cost of 1X is always 2Y, then what is the maximum units of good Y the economy can produce?
- 5
  - 200
  - 20
  - 500
  - none of the above

ANS: C                      PTS: 1                      DIF: Difficult                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost                      NOT: New

95. An economy can produce either of these two combinations of X and Y: 1,000X and 0Y or 400Y and 0X. Furthermore, the opportunity cost between the two goods is always constant. Which of the following combinations of the two goods, X and Y, is it possible for the economy can produce?
- 700X, 280Y
  - 600X, 250Y
  - 400X, 150Y
  - 100X, 600Y
  - 300X, 280Y

ANS: E                      PTS: 1                      DIF: Difficult                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

96. If there is always a 4-for-1 tradeoff between producing good X and Y, it follows that the opportunity cost of X (in terms of Y)
- changes at low levels of X.
  - rises at high levels of Y.
  - changes at high levels of X.
  - is always the same.

ANS: D                    PTS: 1                    DIF: Easy                    NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

97. The economy is currently on its production possibilities frontier (PPF). A politician says that it is possible to get more of everything---more infrastructure, more schools, more national defense, more spending on social programs, and so on. The politician is
- correct if he is assuming a rightward-shifting PPF.
  - incorrect if he is assuming a rightward-shifting PPF.
  - incorrect if he is assuming a PPF that does not change.
  - correct if he is assuming a PPF that does not change.
  - a and c

ANS: E                    PTS: 1                    DIF: Moderate                    NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost                    MSC: Economics 24/7

98. The law of increasing opportunity costs states that as
- less of a good is produced, the higher the opportunity costs of producing that good.
  - more of a good is produced, the lower the opportunity costs of producing that good.
  - more of a good is produced, the higher the opportunity costs of producing that good.
  - more of a good is produced, the opportunity cost of producing the good remains the same.
  - a and b

ANS: C                    PTS: 1                    DIF: Moderate                    NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

99. Currently, 100 units of good X are being produced and the opportunity cost of producing 1X is 3Y. If good X is produced at increasing opportunity costs, then when the economy produces 120 units of good X the opportunity cost of producing 1Y could be
- 1/4X
  - 1/3X
  - 1/2X
  - 1X
  - none of the above

ANS: A                    PTS: 1                    DIF: Difficult                    NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

100. What is the reason for the law of increasing opportunity costs?
- There is no reason: it just is.
  - People have varying abilities and those with lower opportunity costs of producing a good produce it before people with higher opportunity costs produce it.
  - The price of a good rises as more of it is demanded.
  - As more of a good is produced, the taxes applied to the production of the good rise.
  - c and d

ANS: B                    PTS: 1                    DIF: Moderate                    NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

101. If a production possibilities frontier (PPF) is concave downward, it follows that
- opportunity costs are constant between two goods.
  - the opportunity costs (of producing the good on the horizontal axis) rise as more of the good is produced.
  - the opportunity costs (of producing the good on the horizontal axis) fall as more of the good is produced.
  - the opportunity costs (of producing the good on the horizontal axis) first rise and then fall as more of the good is produced.
  - none of the above

ANS: B                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

102. If the law of increasing opportunity costs is operable, and currently the opportunity cost of producing the 101st unit of good X is 5Y, then the opportunity cost of producing the 201st unit of good X is most likely to be
- less than 5Y.
  - more than 1/5Y but less than 5Y.
  - more than 5Y
  - less than 1/5Y but more than zero.
  - none of the above

ANS: C                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

103. If the law of increasing opportunity costs is operable, and currently the opportunity cost of producing the 1,000th unit of good X is 0.5Y, then the opportunity cost of producing the 2,001st unit of good X is most likely to be
- less than 0.5Y.
  - more than 0.5Y but less than 2Y.
  - more than 0.5Y
  - less than 0.5Y but more than zero.
  - none of the above

ANS: C                    PTS: 1                    DIF: Moderate           NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost                    NOT: New

104. Which scenario below most accurately describes the process by which a technological change can affect employment patterns across industries?
- A technological advance makes it possible to produce more of good X with less labor. As a result, labor is released from producing good X. Some of this labor ends up producing goods Y and Z.
  - A technological advance makes it possible to produce less of good X with less labor. As a result, labor is released from producing good X. Some of this labor ends up producing good Y.
  - A technological advance makes it possible to produce more of good X with more labor. As a result, more labor is needed to produce good X. There is less labor available to produce goods Y and Z.
  - A technological advance makes it possible to produce more of good X with less labor. As a result, labor becomes more important to the production of good X. More labor ends up producing good X.
  - none of the above

ANS: A                    PTS: 1                    DIF: Difficult           NAT: Analytic

LOC: Productivity and growth

105. If people (on average) live longer, and the production possibilities frontier (PPF) in the economy shifts outward, does it follow that per-capita output will rise?
- Yes, because if the PPF shifts outward, it means there is more output.
  - No, because when the PPF shifts outward, and there is greater output, the population always rises by a greater percentage than the rise in output.
  - Not necessarily. First, it depends on whether or not the capacity to produce more output is realized. Then, it depends on the percentage rise in output relative to the percentage rise in the population.
  - Not necessarily. First, it depends on whether or not the capacity to produce more output is realized. Then, it depends on the percentage rise in output relative to the percentage rise in income.

ANS: C                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Productivity and growth

106. The economy was at point A producing 100X and 200Y. It moved to point B where it produces 200X and 300Y. It follows that
- point A may have been a point below the economy's PPF, while point B may lie on the PPF.
  - the economy's PPF could have shifted outward and point A was a point on the economy's old PPF.
  - the economy has moved from one point on its PPF to another point on the same PPF.
  - a or b
  - a or c

ANS: D                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

107. If an economy is operating on its production possibilities frontier (PPF), are there any unemployed resources in the economy?
- Yes, because if there weren't any unemployed resources the economy would be producing beyond its PPF.
  - No, because if there were any unemployed resources the economy would be producing below its PPF.
  - It depends on whether the economy's PPF is a concave (downward-sloping) curve or a straight line.
  - Yes, because there are always some natural resources that are unemployed.
  - The answer is "yes," but not for any of the reasons specified in answers a through d.

ANS: B                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

108. *Productive efficiency* implies
- the possibility of gains in one area without losses in another.
  - that more output has been produced.
  - the impossibility of gains in one area without losses in another.
  - that prices are stable.
  - c and d

ANS: C                      PTS: 1                      DIF: Easy                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost



109. An economy can produce the following combinations of goods: 50X and 0Y, 40X and 10Y, 30X and 20Y, 20X and 30Y, 10X and 40Y, and 0X and 50Y. The production possibilities frontier (PPF) for the economy is
- concave downward because the opportunity cost of producing the 10th unit of Y is greater than the opportunity cost of producing the first unit of Y.
  - a straight (downward-sloping) line because the opportunity cost of producing the two goods is constant.
  - concave downward because the opportunity cost of producing the 40th unit of Y is less than the opportunity cost of producing the 10th unit of Y.
  - a straight (downward-sloping) line because the opportunity cost of producing the 10th unit of X is greater than the opportunity cost of producing the 40th unit of X.
  - a straight (downward-sloping) line because the opportunity cost of producing the 30th unit of Y is greater than the opportunity cost of producing the 30th unit of X.

ANS: B                    PTS: 1                    DIF: Moderate           NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

110. Which of the following is *not* true about production possibilities frontiers?
- moving from one point to another on a PPF incurs a tradeoff
  - economic growth is shown by shifting the PPF outward
  - unemployment of resources is shown by shifting the PPF inward
  - a PPF can shift inward or outward

ANS: C                    PTS: 1                    DIF: Moderate           NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

111. Country X has a high unemployment rate. It follows that country X is operating
- beyond its production possibilities frontier (PPF).
  - on its PPF.
  - inside (below) its PPF.
  - at an efficient point.
  - b and d

ANS: C                    PTS: 1                    DIF: Moderate           NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

112. Country 1 produces two goods, A and B. Country 2 produces the same two goods. Currently, country 1 produces 100A and 200B and country 2 produces 300A and 700B. Which of the following statements is true?
- If country 1 is on its production possibilities frontier, then country 2 must be on its PPF, too.
  - The PPF for country 1 is necessarily closer to the origin (or further to the left) than the PPF for country 2.
  - If country 1 is operating inefficiently, then so is country 2.
  - Country 2 is operating on its PPF, but country 1 is clearly not operating on its PPF.
  - none of the above

ANS: E                    PTS: 1                    DIF: Moderate           NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

113. If Sean can bake bread at a lower opportunity cost than Jason, and Jason can produce paintings at a lower opportunity cost than Sean, it follows that
- Sean has a comparative advantage in paintings and Jason has a comparative advantage in baking bread.

- b. Both Sean and Jason have a comparative advantage in baking bread.
- c. Both Sean and Jason have a comparative disadvantage in producing paintings.
- d. Sean has a comparative advantage in baking bread and Jason has a comparative advantage in producing paintings.
- e. There is not enough information to answer the question.

ANS: D                    PTS: 1                    DIF: Easy                    NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

114. Carlos can produce the following combinations of X and Y: 10X and 10Y, 5X and 15Y, and 0X and 20Y. The opportunity cost of one unit of X for Carlos is
- a. 1 unit of Y.
  - b. 2 units of Y.
  - c. 1/2 unit of Y.
  - d. 1/4 unit of Y.
  - e. none of the above

ANS: A                    PTS: 1                    DIF: Moderate                    NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

115. Keisha can produce the following combinations of X and Y: 100X and 20Y, 50X and 30Y, or 0X and 40Y. The opportunity cost of one unit of Y for Keisha is
- a. 5 units of X.
  - b. 0.2 units of X.
  - c. 3 units of X.
  - d. 1/2 unit of X.
  - e. none of the above

ANS: A                    PTS: 1                    DIF: Moderate                    NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

116. Michael can produce the following combinations of X and Y: 10X and 10Y, 5X and 15Y, and 0X and 20Y. Vernon can produce the following combinations of X and Y: 100X and 20Y, 50X and 30Y, or 0X and 40Y. It follows that
- a. Michael has the comparative advantage in producing X and Vernon has the comparative advantage in producing Y.
  - b. Michael has the comparative advantage in producing Y and Vernon has the comparative advantage in producing X.
  - c. Neither Michael nor Vernon has a comparative advantage in producing X.
  - d. Neither Michael nor Vernon has a comparative advantage in producing Y.
  - e. There is not enough information to answer the question.

ANS: B                    PTS: 1                    DIF: Difficult                    NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

117. A person has a comparative advantage in the production of a good when they can produce the product at a(n) \_\_\_\_\_ opportunity cost compared to another person.
- a. higher
  - b. increasing
  - c. lower
  - d. equal

ANS: C                    PTS: 1                    DIF: Easy                    NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

118. Between 1910 and today, the number of farmers in the United States \_\_\_\_\_ dramatically as a result of \_\_\_\_\_ in farming in the twentieth century.
- a. dropped; technological improvements
  - b. rose; technological improvements
  - c. dropped; technological declines
  - d. rose; technological declines

ANS: A                      PTS: 1                      DIF: Easy                      NAT: Analytic  
 LOC: Productivity and growth

119. Suppose Kelsey is taking just two courses and is at a point on her PPF of grades. Now this PPF shifts inward and Kelsey moves to a point on the new PPF. Then it is impossible for
- a. both of her grades to fall.
  - b. both of her grades to rise.
  - c. one of her grades to rise and the other grade to fall.
  - d. one of her grades to fall while the other grade stays constant.

ANS: B                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost                      MSC: Economics 24/7

120. Suppose Kelsey is taking just two courses and is at a point inside her PPF of grades. If Kelsey changes her work habits then it is impossible for
- a. either one of her grades to rise.
  - b. both of her grades to rise.
  - c. both of her grades to fall.
  - d. either one of her grades to rise while the other grade remains constant.
  - e. none of the above is impossible in this situation

ANS: E                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost                      MSC: Economics 24/7

121. The PPF between goods X and Y will be a downward-sloping
- a. straight line if increasing opportunity costs exist.
  - b. straight line if decreasing opportunity costs exist.
  - c. curve that is bowed inward if increasing opportunity costs exist.
  - d. straight line if constant opportunity costs exist.

ANS: D                      PTS: 1                      DIF: Difficult                      NAT: Analytic  
 LOC: Scarcity, tradeoffs, and opportunity cost

Exhibit 2-8

| Mario  |        | Maya   |        |
|--------|--------|--------|--------|
| Good X | Good Y | Good X | Good Y |
| 90     | 0      | 60     | 0      |
| 60     | 30     | 40     | 10     |
| 30     | 60     | 20     | 20     |
| 0      | 90     | 0      | 30     |

122. Refer to Exhibit 2-8. Who has the comparative advantage in the production of good X?
- a. Mario
  - b. Maya
  - c. Both Mario and Maya
  - d. Neither Mario nor Maya

ANS: B                      PTS: 1                      DIF: Moderate                      NAT: Analytic

LOC: Scarcity, tradeoffs, and opportunity cost

NOT: New

123. Refer to Exhibit 2-8. Who has the comparative advantage in the production of good Y?
- a. Mario
  - b. Maya
  - c. Both Mario and Maya
  - d. Neither Mario nor Maya

ANS: A                      PTS: 1                      DIF: Moderate                      NAT: Analytic

LOC: Scarcity, tradeoffs, and opportunity cost                      NOT: New

124. Refer to Exhibit 2-8. Through specialization and trade \_\_\_\_\_ can consume a combination of goods that lies beyond his/her PPF.
- a. Mario, but not Maya,
  - b. Maya, but not Mario,
  - c. both Mario and Maya
  - d. neither Mario nor Maya

ANS: A                      PTS: 1                      DIF: Moderate                      NAT: Analytic

LOC: Scarcity, tradeoffs, and opportunity cost                      NOT: New

Exhibit 2-9

| Alex   |        | Amber  |        |
|--------|--------|--------|--------|
| Good A | Good B | Good A | Good B |
| 0      | 300    | 0      | 160    |
| 25     | 225    | 30     | 120    |
| 50     | 150    | 60     | 80     |
| 75     | 75     | 90     | 40     |
| 100    | 0      | 120    | 0      |

125. Refer to Exhibit 2-9. Who has the comparative advantage in the production of good A?
- a. Alex
  - b. Amber
  - c. Both Alex and Amber
  - d. Neither Alex nor Amber

ANS: B                      PTS: 1                      DIF: Moderate                      NAT: Analytic

LOC: Scarcity, tradeoffs, and opportunity cost                      NOT: New

126. Refer to Exhibit 2-9. Who has the comparative advantage in the production of good B?
- a. Alex
  - b. Amber
  - c. Both Alex and Amber
  - d. Neither Alex nor Amber

ANS: A                      PTS: 1                      DIF: Moderate                      NAT: Analytic

LOC: Scarcity, tradeoffs, and opportunity cost                      NOT: New

127. Refer to Exhibit 2-9. Through specialization and trade \_\_\_\_\_ can consume a combination of goods that lies beyond his/her PPF.
- a. Alex, but not Amber,
  - b. Amber, but not Alex

- c. Alex and Amber
- d. neither Alex nor Amber

ANS: A                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost                      NOT: New

### TRUE/FALSE

1. A decrease in unemployment causes the PPF to shift outward (to the right).

ANS: F                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

2. The law of increasing opportunity cost results from the varying ability of resources to adapt to the production of different goods and it helps to explain why production possibilities curves are typically bowed outward.

ANS: T                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

3. Production possibilities curves can shift outward but they do not shift inward.

ANS: F                      PTS: 1                      DIF: Easy                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

4. Productive efficiency implies that more of one good can not be produced without a loss of production of the other good.

ANS: T                      PTS: 1                      DIF: Easy                      NAT: Analytic  
LOC: Efficiency and equity

5. If the PPF for two goods is a downward-sloping straight line, the resources used to produce those goods are equally well suited to the production of both goods.

ANS: T                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost                      NOT: New

6. It is possible for one person to have a comparative advantage in the production of both goods being produced.

ANS: F                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

7. Economists use the term *productive inefficiency* to describe adverse third-party effects of a transaction.

ANS: F                      PTS: 1                      DIF: Easy                      NAT: Analytic  
LOC: Efficiency and equity

8. A decrease in the quantity of resources available causes a movement down along a given PPF.

ANS: F                      PTS: 1                      DIF: Easy                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

9. The law of increasing opportunity cost helps to explain why PPF's are typically bowed-outward.

ANS: T                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

10. In a PPF graph of goods X and Y, points that lie beyond (to the right of) the PPF represent combinations of the two goods that are currently unattainable.

ANS: T                      PTS: 1                      DIF: Easy                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost

11. A production possibilities frontier separates an attainable region from an unattainable region.

ANS: T                      PTS: 1                      DIF: Moderate                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost                      NOT: New

12. It is possible through trade for a country to consume a combination of goods that lies beyond its production possibilities frontier.

ANS: T                      PTS: 1                      DIF: Easy                      NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost                      NOT: New

## ESSAY

1. Give a definition of an *advance in technology*. Suppose that you are drawing a PPF for civilian goods and military goods, describe the effect on the PPF of an advance in technology in both civilian goods and military goods. How would the impact on the PPF be different if the technological improvement only helped in the production of military goods, but not civilian goods?

ANS:

An advance in technology commonly refers to the ability to produce more output with a fixed amount of resources (or the same amount of output with a smaller amount of resources). When technology advances in the production of both products the PPF shifts outward. When technology advances in the production of military goods, but not civilian goods, the PPF shifts outward along the axis for military goods and the intercept remains constant along the axis for civilian goods.

PTS: 1                      DIF: Moderate                      NAT: Analytic                      LOC: Productivity and growth  
NOT: New

2. Why is the production possibilities frontier (PPF) typically bowed-outward? Under what circumstances would the PPF be a straight line?

ANS:

The PPF is typically bowed-outward due to the law of increasing opportunity costs. As more of a product is produced, it becomes increasingly more difficult to find resources that are well-suited to producing that product. Therefore, the opportunity cost of producing more units grows and the PPF becomes steeper and steeper. The PPF is a straight line when the resources used to produce the two products are perfectly interchangeable, and thus the opportunity cost of producing more units is constant.

PTS: 1                      DIF: Difficult                      NAT: Analytic

LOC: Scarcity, tradeoffs, and opportunity cost

3. Using your own words, describe the *law of increasing opportunity costs*. Be sure to explain why this phenomenon occurs and how it helps to contribute to the shape of the production possibilities frontier.

ANS:

People (and other resources) have varying abilities when it comes to producing a given product which results in a non-constant opportunity cost. Those resources that are better suited at making the product will have a lower opportunity cost than those who are less-suited. As more of a product is produced, it becomes increasingly more difficult to find resources that are well-suited to producing that product. Therefore, the opportunity cost of producing more units grows as additional units are produced, and the PPF becomes steeper and steeper. The result is that the PPF is typically bowed-outward due to the law of increasing opportunity costs.

PTS: 1                    DIF: Difficult            NAT: Analytic  
LOC: Scarcity, tradeoffs, and opportunity cost                    NOT: New

4. Describe what *productive efficiency* means. How is productive efficiency represented by a PPF?

ANS:

An economy is producing efficiently if it is producing the maximum amount of output with a set amount of resources and technology. Efficiency is represented by all of the points that lie along the PPF.

PTS: 1                    DIF: Moderate            NAT: Analytic            LOC: Efficiency and equity

5. Explain how a technological advancement in one sector of the economy can lead to a change in the number of people who work in another sector of the economy. Give an example to help support your answer.

ANS:

A technological advancement in one sector of the economy can lead to fewer people being needed to produce the goods in that sector. This will release people from that sector and allow them to take jobs in other sectors of the economy. This is what happened in the farming industry during the 20th century. As more and more farming tasks that had once been performed by people were being performed by machinery and computers, the former farmers were then free to find jobs in fields such as manufacturing and service industries.

PTS: 1                    DIF: Moderate            NAT: Analytic  
LOC: The study of economics and definitions of economics