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: Difficulty: Easy
   NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
   KEY: Bloom's: Comprehension

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: Difficulty: Challenging
   NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
   KEY: Bloom's: Comprehension

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: Difficulty: Moderate
   NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
   KEY: Bloom's: Application

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 a productive inefficient point.
   b. point A may be a productive inefficient point.
   c. point A may be a productive efficient point.
   d. point B is a productive efficient point.
   e. b and c

   ANS: E   PTS: 1   DIF: Difficulty: Challenging

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

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.

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

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.
   e. a downward-sloping curve that is bowed inward.

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: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Analysis

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: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

11. A PPF can
    a.   shift outward but not inward.
    b.   shift inward but not outward.
    c.   shift inward or outward.
    d.   shift neither inward nor outward.

ANS: C   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

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
    a.   1 pear.
    b.   7 apples.
    c.   3 apples.
    d.   21 pears.

ANS: C   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

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
    a.   2 apricots.
    b.   1 orange.
    c.   98 apricots.
    d.   3 oranges.

ANS: B   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

14. The point where the PPF intersects the vertical axis is
    a.   unattainable.

b. attainable and productive efficient.
c. attainable but productive inefficient.
d. attainable and neither productive efficient nor productive inefficient.

ANS: B   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
KEY: Bloom's: Comprehension

15. The point where the PPF intersects the horizontal axis is
a. unattainable.
b. attainable and productive efficient.
c. attainable but productive inefficient.
d. attainable and neither productive efficient nor productive inefficient.

ANS: B   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
KEY: Bloom's: Comprehension

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
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: B   PTS: 1   DIF: Difficulty: Challenging
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

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: Difficulty: Challenging
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

18. Suppose the economy goes from a point on its production possibilities frontier (PPF) to a point below 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: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
KEY: Bloom's: Application   NOT: New

19. Suppose the economy goes from a point on its production possibilities frontier (PPF) to a point below 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: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

20. An increase in the quantity of resources
    a. shifts the PPF leftward.
    b. shifts the PPF rightward.
    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: Difficulty: Easy
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

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

ANS: A   PTS: 1   DIF: Difficulty: Easy
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

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

ANS: C   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

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

ANS: A   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

24. 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 outward if increasing opportunity costs exist.
    d. curve that is bowed outward if constant opportunity costs exist.

    ANS: C   PTS: 1   DIF: Difficulty: Challenging
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Comprehension

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
    a. better suited for the production of some goods than others.
    b. used efficiently.
    c. relatively cheap at low levels of output.
    d. used to produce consumption goods.

    ANS: A   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Comprehension

26. Economic growth causes the PPF to
    a. shift leftward.
    b. shift rightward.
    c. remain constant.
    d. go from a straight line to a curve.

    ANS: B   PTS: 1   DIF: Difficulty: Easy
    NAT: BUSPROG: Analytic   LOC: DISC: Productivity and growth
    KEY: Bloom's: Knowledge

27. Which of the following statements is *false*?
    a. If there are only two goods, guns and butter, it is possible to produce more of both goods through economic growth.
    b. 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 a productive 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 a productive 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 a productive efficient point.

    ANS: C   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
    KEY: Bloom's: Comprehension

28. An economy is *productive efficient* 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: Difficulty: Easy
    NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity

29. 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: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
    KEY: Bloom's: Comprehension

30. 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: Difficulty: Easy
    NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
    KEY: Bloom's: Comprehension

31. 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: Difficulty: Easy
    NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
   KEY: Bloom's: Comprehension

32. 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. 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 productive efficiency.

    ANS: D   PTS: 1   DIF: Difficulty: Easy
    NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
    KEY: Bloom's: Application

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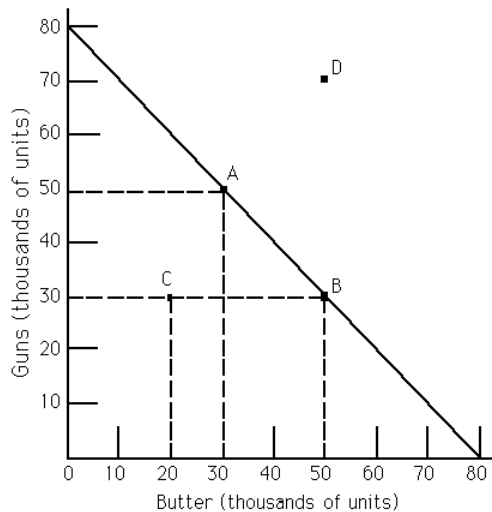
33. Refer to Exhibit 2-1. The PPF illustrates
    a. constant opportunity costs between guns and butter.
    b. that guns are more important than butter.
    c. increasing opportunity costs between guns and butter.
    d. the opportunity cost of one unit of guns is four units of butter.
    e. none of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

    ANS: A   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application

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

    ANS: C   PTS: 1   DIF: Difficulty: Easy
    NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
    KEY: Bloom's: Comprehension

35. Refer to Exhibit 2-1. A movement from point B to point D
    a. 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: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Comprehension

36. Refer to Exhibit 2-1. If the economy is at point C, it follows that
    a. more guns and more butter could be produced with available resources than are currently
       being produced.
    b. only more guns could be produced with available resources than are currently being

produced.
  c. only more butter can be produced with available resources than are currently being produced.
  d. C is an unattainable point.

ANS: A   PTS: 1   DIF: Difficulty: Easy
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

37. 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: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

38. 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: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

39. Refer to Exhibit 2-1. The opportunity cost of moving from point A to B is
  a. 10,000 units of butter.
  b. 20,000 units of butter.
  c. 20,000 units of guns.
  d. 10,000 units of guns.

ANS: C   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application   NOT: New

40. According to the text, farming today in the U.S. 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: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Productivity and growth
KEY: Bloom's: Knowledge

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: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Productivity and growth
KEY: Bloom's: Knowledge

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

ANS: B   PTS: 1   DIF: Difficulty: Easy
NAT: BUSPROG: Analytic   LOC: DISC: Productivity and growth
KEY: Bloom's: Comprehension
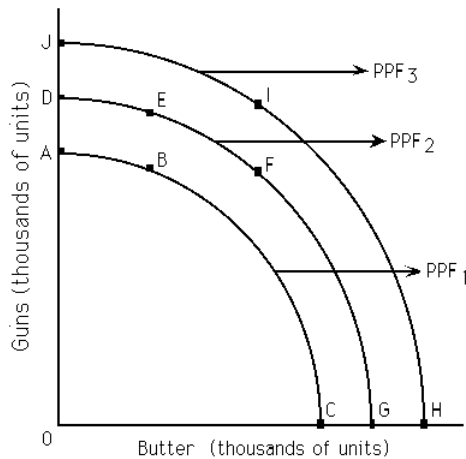
Exhibit 2-2

43. Refer to Exhibit 2-2. If PPF$_2$ is the relevant production possibilities frontier, then point _____ illustrates productive inefficiency.
   a. A
   b. B
   c. C
   d. J
   e. a, b, or c

ANS: E   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
KEY: Bloom's: Comprehension   NOT: New

44. Refer to Exhibit 2-2. If PPF$_2$ is the relevant production possibilities frontier, then point _____ is unattainable.
   a. A
   b. G
   c. D
   d. J

ANS: D   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

45. Refer to Exhibit 2-2. If PPF$_2$ is the relevant production possibilities frontier, then point _____ is productive efficient.
 a. B
 b. D
 c. I
 d. F
 e. both b and d

ANS: E   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
KEY: Bloom's: Comprehension

46. Refer to Exhibit 2-2. If PPF$_2$ is the relevant production possibilities frontier, a significant loss of resources will
 a. move this society from point D to point G on PPF$_2$.
 b. move this society to PPF$_1$.
 c. move this society to PPF$_3$.
 d. not affect this society.

ANS: B   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

47. Refer to Exhibit 2-2. The production possibilities frontiers shown in this exhibit depict _____ opportunity costs.
 a. constant
 b. increasing
 c. decreasing
 d. There is not enough information provided to answer this question.

ANS: B   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

Exhibit 2-3

Capital Goods (thousands of units)

Consumer Goods (thousands of units)
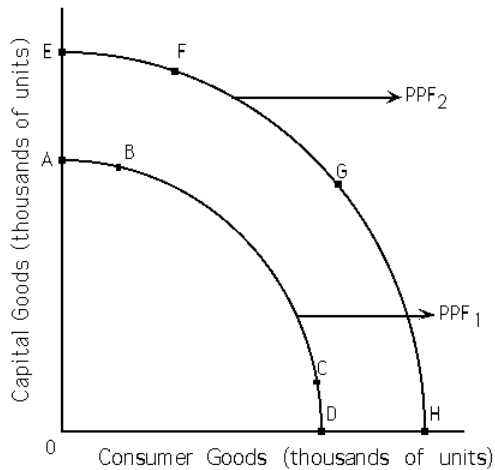
48. Refer to Exhibit 2-3. If PPF$_1$ is the relevant production possibilities frontier, society may move to PPF$_2$ as a result of
    a. an increase in resources.
    b. a decrease in resources.
    c. an increase in technology.
    d. both a and c
    e. both b and c

    ANS: D   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Productivity and growth
    KEY: Bloom's: Comprehension

49. Refer to Exhibit 2-3. If PPF$_1$ is the relevant production possibilities frontier, society can choose points that lie only
    a. below PPF$_1$.
    b. below or on PPF$_1$.
    c. on PPF$_2$.
    d. none of the above

    ANS: B   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Comprehension

50. Refer to Exhibit 2-3. If PPF$_1$ is the relevant production possibilities frontier, PPF$_2$ may depict
    a. economic growth.
    b. an increase in resources.
    c. an increase in technology.
    d. both b and c
    e. all of the above

    ANS: E   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Productivity and growth
    KEY: Bloom's: Comprehension

51. A productive efficient society
    a. produces at a point on its PPF.
    b. can produce more of one good only by giving up some of another 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: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
KEY: Bloom's: Comprehension

52. 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: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

53. 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: Difficulty: Challenging
NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
KEY: Bloom's: Comprehension

54. With a constant opportunity cost between goods A and B, the PPF for goods A and B 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: Difficulty: Easy
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

55. 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: Difficulty: Easy
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

56. If there is an increase in the amount of good B foregone as every additional unit of good A is produced, the PPF between goods A and B would
a. be a straight line.

b. be a bowed-outward curve.
c. be a bowed-inward curve.
d. not exist.

ANS: B   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

57. A PPF is bowed outward as a result of
a. constant opportunity costs.
b. increasing opportunity costs.
c. decreasing opportunity costs.
d. scarcity.
e. choice.

ANS: B   PTS: 1   DIF: Difficulty: Easy
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

58. A PPF is a straight line as a result of
a. constant opportunity costs.
b. increasing opportunity costs.
c. decreasing opportunity costs.
d. scarcity.
e. choice.

ANS: A   PTS: 1   DIF: Difficulty: Easy
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

59. 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
a. 1/3 hour for Andy and 1 hour for John.
b. 1 hour for Andy and 1 hour for John.
c. 3 loaves of bread for Andy and 1 loaf of bread for John.
d. 1/3 loaves of bread for Andy and 1 loaf of bread for John.
e. none of the above

ANS: C   PTS: 1   DIF: Difficulty: Challenging
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

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

ANS: D   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Productivity and growth
KEY: Bloom's: Comprehension
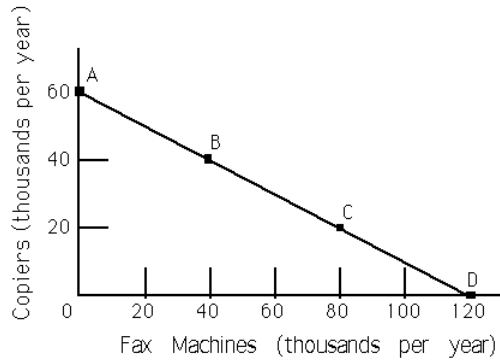
Exhibit 2-4

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

    ANS: C   PTS: 1   DIF: Difficulty: Easy
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Knowledge

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

    ANS: E   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
    KEY: Bloom's: Application

63. Refer to Exhibit 2-4. The opportunity cost of moving from point A to point B is
    a. 60,000 copiers.
    b. 40,000 copiers.
    c. 20,000 copiers.
    d. 20,000 fax machines.
    e. 40,000 fax machines.

    ANS: C   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application

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

ANS: C   PTS: 1   DIF: Difficulty: Easy
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

Exhibit 2-5

65. Refer to Exhibit 2-5. The economy is currently operating at point F. The opportunity cost of moving to point E is approximately
    a. 35 fax machines.
    b. 55 fax machines.
    c. zero fax machines.
    d. 40 fax machines.

ANS: C   PTS: 1   DIF: Difficulty: Moderate
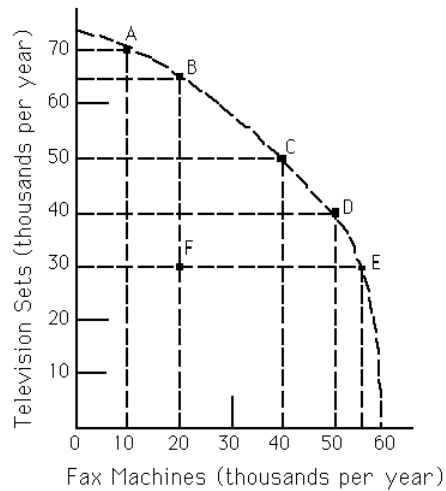NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

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

ANS: A   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

67. Refer to Exhibit 2-5. The opportunity cost of moving from point A to point B is approximately
    a. 5,000 televisions.
    b. 5,000 fax machines.
    c. 10,000 televisions.
    d. 10,000 fax machines.

ANS: A   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

68. Refer to Exhibit 2-5. The opportunity cost of moving from point D to point C is
    a. 5,000 televisions.
    b. 5,000 fax machines.
    c. 10,000 televisions.
    d. 10,000 fax machines.

    ANS: D   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application

69. 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: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application

70. 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: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application

71. 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 productive efficient.
    e. None of the points are productive efficient.

    ANS: A   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
    KEY: Bloom's: Application

72. 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: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application

73. 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 all other 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 below the PPF.
    d. The PPF would be upward sloping.

    ANS: C   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Analysis

74. 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: Difficulty: Easy
    NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
    KEY: Bloom's: Knowledge

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

Strategy	Score in Economics	Score in Statistics
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: Difficulty: Easy
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application   MSC: Economics 24/7

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

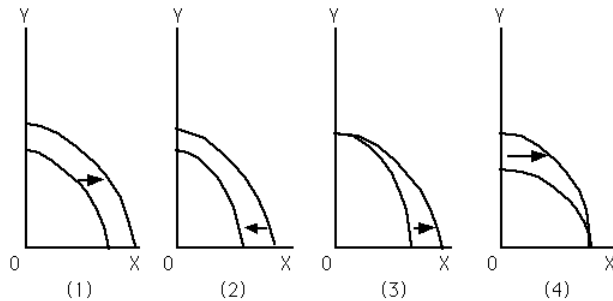 | Strategy | Score in Economics | Score in Statistics |
    | --- | --- | --- |
    | A | 94 | 79 |
    | B | 77 | 90 |

    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: Difficulty: Easy
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application   MSC: Economics 24/7

Exhibit 2-6

77. 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: Difficulty: Moderate
     NAT: BUSPROG: Analytic   LOC: DISC: Productivity and growth
     KEY: Bloom's: Application

78. 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: Difficulty: Moderate
     NAT: BUSPROG: Analytic   LOC: DISC: Productivity and growth
     KEY: Bloom's: Application

79. 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: Difficulty: Moderate
     NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
     KEY: Bloom's: Application

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

    ANS: E   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application

81. 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: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Productivity and growth
    KEY: Bloom's: Application

82. 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: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Productivity and growth
    KEY: Bloom's: Application

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

    ANS: A   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Productivity and growth
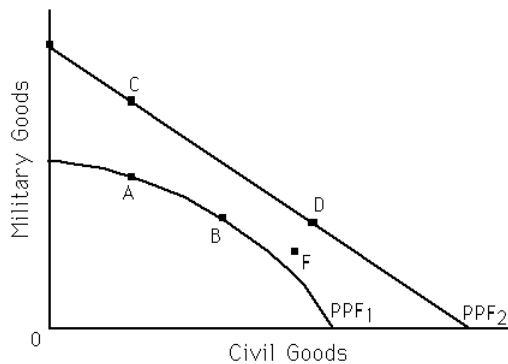   KEY: Bloom's: Application

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

ANS: E   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Productivity and growth
KEY: Bloom's: Application

Exhibit 2-7

85. Refer to Exhibit 2-7. Which of the following statements is true?
    a. Points B and D are more efficient than points A and C.
    b. If the economy's PPF is represented by PPF_1, points A and B are productive efficient, while C and D are unattainable.
    c. If the economy's PPF is represented by PPF_2, points C and D are productive efficient, while A and B are unattainable.
    d. both a and c

    ANS: B   PTS: 1   DIF: Difficulty: Challenging
    NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
    KEY: Bloom's: Application

86. 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. a movement from A to C
    b. a movement from B to D
    c. a movement from C to D
    d. a movement from F to D
    e. none of the above

    ANS: C   PTS: 1   DIF: Difficulty: Challenging
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application

87. Refer to Exhibit 2-7. Point F is
    a. unattainable if the economy's PPF is PPF_1.
    b. inefficient if the economy's PPF is PPF_2.
    c. attainable if the economy's PPF is PPF_2.
    d. all of the above
    e. none of the above

    ANS: D   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
    KEY: Bloom's: Application

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.   a movement from A to C
   b.   a movement from B to D
   c.   a movement from F to D
   d.   a movement from B to A
   e.   none of the above

   ANS: D   PTS: 1   DIF: Difficulty: Moderate
   NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
   KEY: Bloom's: Application

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

   ANS: A   PTS: 1   DIF: Difficulty: Moderate
   NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
   KEY: Bloom's: Application

90. If the economy is on the production possibilities frontier (PPF), the economy is
   a.   productive inefficient.
   b.   operating with no unemployed resources.
   c.   productive efficient.
   d.   b and c
   e.   none of the above

   ANS: D   PTS: 1   DIF: Difficulty: Easy
   NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
   KEY: Bloom's: Comprehension

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

   ANS: B   PTS: 1   DIF: Difficulty: Easy
   NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
   KEY: Bloom's: Comprehension

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.
   a.   4.0
   b.   5.0
   c.   2.5
   d.   1.0
   e.   none of the above

ANS: D   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

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 number of units of good Y the economy can produce?
    a. 250
    b. 100
    c. 20
    d. 500
    e. none of the above

    ANS: D   PTS: 1   DIF: Difficulty: Challenging
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application

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?
    a. 5
    b. 200
    c. 20
    d. 500
    e. none of the above

    ANS: C   PTS: 1   DIF: Difficulty: Challenging
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application   NOT: New

95. An economy can produce either of these two combinations of goods 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 to produce?
    a. 700X, 280Y
    b. 600X, 250Y
    c. 400X, 150Y
    d. 100X, 600Y
    e. 300X, 280Y

    ANS: A   PTS: 1   DIF: Difficulty: Challenging
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application

96. If there is always a 4-for-1 tradeoff between producing good X and good Y, it follows that the opportunity cost of X (in terms of Y) _____ and the PPF for these two goods is _____.
    a. decreases at low levels of X; a straight line
    b. rises at high levels of Y; bowed-outward
    c. decreases at high levels of X; bowed-outward
    d. is always the same; a straight line

    ANS: D   PTS: 1   DIF: Difficulty: Easy
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application   NOT: New

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
    a. correct if he is assuming a rightward-shifting PPF.
    b. incorrect if he is assuming a rightward-shifting PPF.
    c. incorrect if he is assuming a PPF that does not change.
    d. correct if he is assuming a PPF that does not change.
    e. a and c

    ANS: E   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application

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

    ANS: C   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Comprehension

99. Currently an economy is producing (at a point on its production possibilities frontier) 100 units of good X 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 (on the same PPF) the opportunity cost of producing 1Y (not 1X) could be
    a. 1/4X.
    b. 1/3X.
    c. 1/2X.
    d. 1X.
    e. none of the above

    ANS: A   PTS: 1   DIF: Difficulty: Challenging
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application

100. What is the reason for the law of increasing opportunity costs?
    a. There is no reason: it is just one of the laws of economics.
    b. Resources have varying abilities and those with lower opportunity costs of producing a good will be used to produce it before resources with higher opportunity costs produce it.
    c. The price of a good rises as more of it is demanded.
    d. As more of a good is produced, the taxes applied to the production of the good rise.
    e. c and d

    ANS: B   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Comprehension

101. If a production possibilities frontier (PPF) is concave outward, it follows that
    a. opportunity costs are constant between two goods.
    b. the opportunity cost (of producing the good on the horizontal axis) rises as more of the good

is produced.
c. the opportunity cost (of producing the good on the horizontal axis) falls as more of the good is produced.
d. the opportunity cost (of producing the good on the horizontal axis) first rises and then falls as more of the good is produced.
e. none of the above

ANS: B   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

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 is X is most likely to be
a. less than 5Y.
b. more than 1/5Y but less than 5Y.
c. more than 5Y
d. less than 1/5Y but more than zero.

ANS: C   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

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 is X is most likely to be
a. less than 0.5Y.
b. more than 0.5Y but less than 2Y.
c. more than 0.5Y
d. less than 0.5Y but more than zero.
e. none of the above

ANS: C   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

104. Which scenario below most accurately describes the process by which a technological change can affect employment patterns across industries?
a. 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.
b. 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.
c. 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.
d. 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.
e. none of the above

ANS: A   PTS: 1   DIF: Difficulty: Challenging

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

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

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

108. 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
    a.   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.
    b.   a straight (downward-sloping) line because the opportunity cost of producing the two goods is constant.
    c.   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.
    d.   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.
e. 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: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

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

ANS: C   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

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

ANS: C   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

111. 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?
    a. If country 1 is on its production possibilities frontier, then country 2 must be on its PPF, too.
    b. The PPF for country 1 is necessarily closer to the origin (or further to the left) than the PPF for country 2.
    c. If country 1 is productive inefficient, then so is country 2.
    d. Country 2 is operating on its PPF, but country 1 is clearly not operating on its PPF.
    e. none of the above

ANS: E   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

112. 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
    a. 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: Difficulty: Easy
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

113. 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: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

114. 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: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

115. 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: Difficulty: Challenging
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

116. 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: Difficulty: Easy
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Knowledge

117. 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: Difficulty: Easy
    NAT: BUSPROG: Analytic   LOC: DISC: Productivity and growth
    KEY: Bloom's: Knowledge

118. Suppose Andrea is taking just two courses and is at a point on her PPF of grades for those two courses. Now this PPF shifts inward and Andrea 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: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application   MSC: Economics 24/7

119. Suppose Andrea is taking just two courses and is at a point inside her PPF of grades for those two courses.   If Andrea 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: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application   MSC: Economics 24/7

120. 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: Difficulty: Challenging
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Comprehension

Exhibit 2-8

Maria		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 |

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

    ANS: B   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application

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

    ANS: A   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application

123. Refer to Exhibit 2-8.   If Maria and Maya each specialize in the good in which she has a comparative advantage and then engage in trade, _____ can consume a combination of goods that lies beyond her PPF.
    a. Maria, but not Maya,
    b. Maya, but not Maria,
    c. both Maria and Maya
    d. neither Maria nor Maya

    ANS: C   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application   NOT: New

124. Refer to Exhibit 2-8. For Maya, the opportunity cost of producing one unit of good X is _____ unit(s) of good Y.
    a. 2.00
    b. 1.00
    c. 10.00
    d. 0.50

    ANS: D   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application   NOT: New

125. Refer to Exhibit 2-8. For Maria, the opportunity cost of producing one unit of good X is _____ unit(s) of good Y.
    a. 2.00
    b. 1.00
    c. 10.00
    d. 0.50

    ANS: B   PTS: 1   DIF: Difficulty: Moderate

126. Refer to Exhibit 2-8. For Maya, the opportunity cost of producing one unit of good Y is _____ unit(s) of good X.
    a. 2.00
    b. 1.00
    c. 10.00
    d. 0.50

127. Refer to Exhibit 2-8. For Maria, the opportunity cost of producing one unit of good Y is _____ unit(s) of good X.
    a. 2.00
    b. 1.00
    c. 10.00
    d. 0.50

Exhibit 2-9

Alex		Adam	
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

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

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

ANS: A   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application

130. Refer to Exhibit 2-9. If Alex and Adam each specialize in the good in which he has a comparative advantage and then engage in trade, _____ can consume a combination of goods that lies beyond his PPF.
    a. Alex, but not Adam,
    b. Adam, but not Alex
    c. Alex and Adam
    d. neither Alex nor Adam

    ANS: C   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application   NOT: New

131. Refer to Exhibit 2-9. For Alex, the opportunity cost of producing one unit of good A is _____ unit(s) of good B.
    a. 3.00
    b. 0.33
    c. 0.75
    d. 1.33

    ANS: A   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application   NOT: New

132. Refer to Exhibit 2-9. For Alex, the opportunity cost of producing one unit of good B is _____ unit(s) of good A.
    a. 3.00
    b. 0.33
    c. 0.75
    d. 1.33

    ANS: B   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application   NOT: New

133. Refer to Exhibit 2-9. For Adam, the opportunity cost of producing one unit of good B is _____ unit(s) of good A.
    a. 3.00
    b. 0.33
    c. 0.75
    d. 1.33

    ANS: C   PTS: 1   DIF: Difficulty: Moderate
    NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
    KEY: Bloom's: Application   NOT: New

134. Refer to Exhibit 2-9. For Adam, the opportunity cost of producing one unit of good A is _____ unit(s) of good B.
    a. 3.00
    b. 0.33

c. 0.75
d. 1.33

ANS: D   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Application   NOT: New

TRUE/FALSE

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

   ANS: F   PTS: 1   DIF: Difficulty: Moderate
   NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
   KEY: Bloom's: Comprehension

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: Difficulty: Moderate
   NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
   KEY: Bloom's: Comprehension

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

   ANS: F   PTS: 1   DIF: Difficulty: Easy
   NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
   KEY: Bloom's: Knowledge

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: Difficulty: Easy
   NAT: BUSPROG: Analytic   LOC: DISC: Efficiency and equity
   KEY: Bloom's: Knowledge

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: Difficulty: Moderate
   NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
   KEY: Bloom's: Comprehension

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: Difficulty: Moderate
   NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
   KEY: Bloom's: Comprehension

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

ANS: F   PTS: 1   DIF: Difficulty: Easy
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

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

ANS: T   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

9. 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: Difficulty: Easy
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Knowledge

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

ANS: T   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Knowledge

11. 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: Difficulty: Easy
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension

12. When an economy is not using all of its resources, it is producing at a point below its production possibilities frontier.

ANS: T   PTS: 1   DIF: Difficulty: Moderate
NAT: BUSPROG: Analytic   LOC: DISC: Scarcity, tradeoffs, and opportunity cost
KEY: Bloom's: Comprehension   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: Difficulty: Moderate   NAT: BUSPROG: Analytic
LOC: DISC: Productivity and growth   KEY: Bloom's: Analysis

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: Difficulty: Challenging   NAT: BUSPROG: Analytic
LOC: DISC: Scarcity, tradeoffs, and opportunity cost   KEY: Bloom's: Application

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: Difficulty: Challenging   NAT: BUSPROG: Analytic
LOC: DISC: Scarcity, tradeoffs, and opportunity cost   KEY: Bloom's: Analysis

4. Explain what *productive efficiency* means. Describe how productive efficiency is 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: Difficulty: Moderate   NAT: BUSPROG: Analytic
LOC: DISC: Efficiency and equity   KEY: Bloom's: Comprehension

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: Difficulty: Moderate NAT: BUSPROG: Analytic
LOC: DISC: The study of economics and definitions of economics
KEY: Bloom's: Analysis

6. Assume that two products are being produced: benches and chairs. Create a table that illustrates constant opportunity costs in the production of these two goods. Draw a production possibilities frontier (PPF) based on the data in your table and explain the condition necessary for a PPF to exhibit constant opportunity costs.

ANS:
The following table illustrates constant opportunity costs:

Benches	Chairs
0	160
10	120
20	80
30	40
40	0

The PPF associated with this table would be a downward-sloping straight line with one axis labeled "Benches" and the other axis labeled "Chairs". The opportunity cost in this example is a constant rate of 4 chairs forfeited for every one bench produced. In order for a PPF to exhibit constant opportunity costs, the resources used to produce the products must be equally well-suited to the production of both products.

PTS: 1 DIF: Difficulty: Challenging NAT: BUSPROG: Analytic
LOC: DISC: The study of economics and definitions of economics
KEY: Bloom's: Analysis NOT: New