Test Bank for Macroeconomics 14th Edition by Arnold

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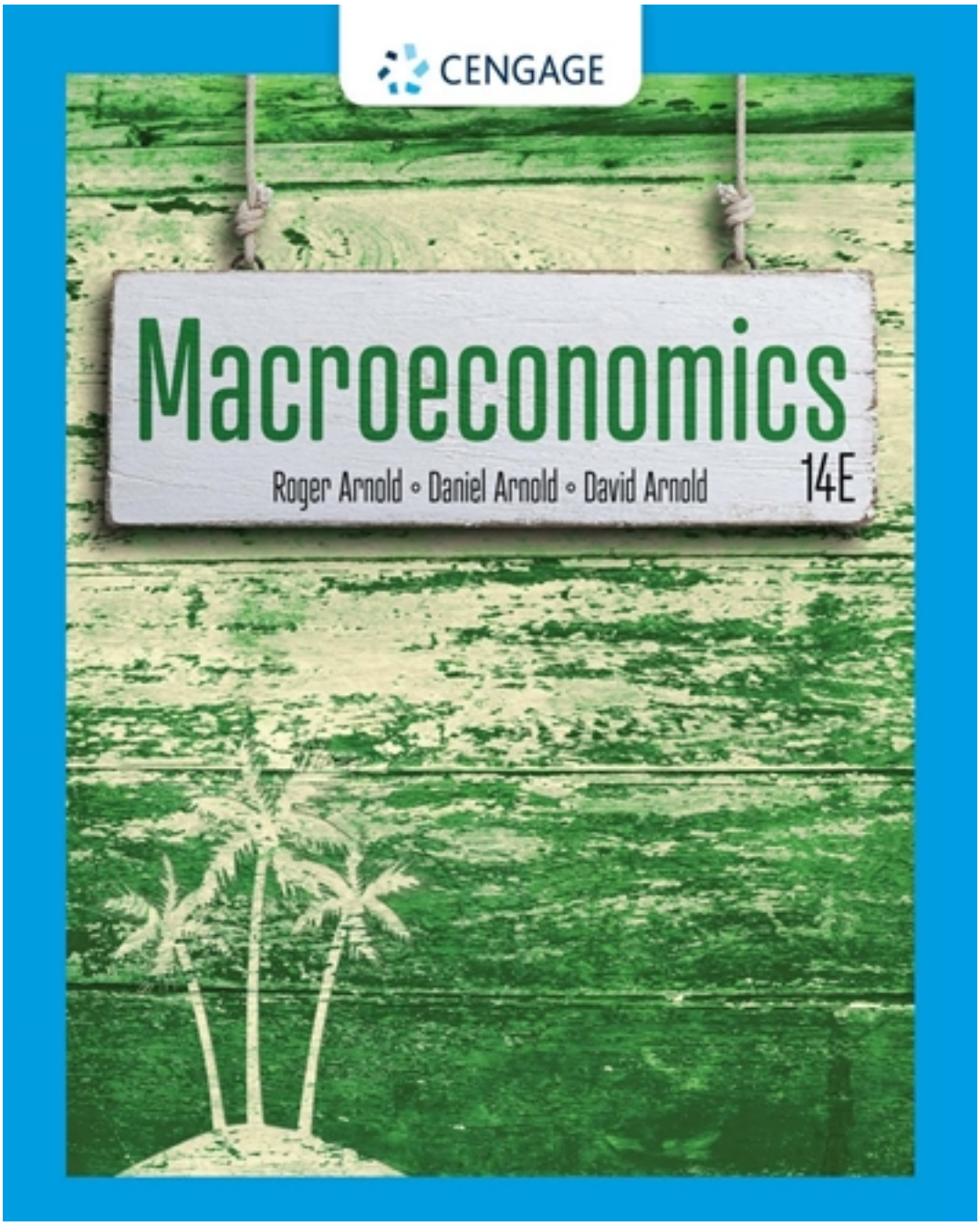

Test Bank

Name:_____ Class:_____ Date:_____

Chapter 02 Production Possibilities Frontier Framework

True / False

1. A decrease in unemployment causes the PPF to shift outward (to the right).
   a. True
   b. False

ANSWER: False

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.
   a. True
   b. False

ANSWER: True

3. Production possibilities frontiers (PPFs) can shift outward, but they do not shift inward.
   a. True
   b. False

ANSWER: False

4. With respect to a PPF for goods X and Y, productive efficiency implies that in order to produce more of good X there will be a reduction in production of good Y.
   a. True
   b. False

ANSWER: True

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.
   a. True
   b. False

ANSWER: True

6. In a situation where two goods can be produced by two different people, it is possible for one person to have a comparative advantage in the production of both goods and the other person to have the comparative advantage in the production of neither good.
   a. True
   b. False

ANSWER: False

7. A decrease in the quantity of resources available causes a movement from one point on a given PPF to another point along the same PPF.
   a. True
   b. False

ANSWER: False

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

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ANSWER: True

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.
   a. True
   b. False

ANSWER: True

10. A production possibilities frontier separates an attainable region from an unattainable region.
   a. True
   b. False

ANSWER: True

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

ANSWER: True

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

ANSWER: True

13. If a society's unemployment rate rises from 5 percent to 8 percent, the result will be a leftward shift of the society's PPF.
   a. True
   b. False

ANSWER: False

14. When opportunity costs are constant, the PPF will be a straight line.
   a. True
   b. False

ANSWER: True

15. Opportunity cost is illustrated by a movement from one point to another on the production possibilities frontier.
   a. True
   b. False

ANSWER: True

16. Economic growth is illustrated by a shift inward (toward the origin) of the PPF.
   a. True
   b. False

ANSWER: False

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Chapter 02 Production Possibilities Frontier Framework

Multiple Choice

17. Points that lie outside (or beyond) the PPF are
    a. attainable.
    b. unattainable.
    c. efficient.
    d. inefficient.

ANSWER: b

18. Which of the following statements is true?
    a. In a world of inefficiently used scarce resources, more production of one good necessarily means less production 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).

ANSWER: c

19. A war destroyed many of the factories in a country. As a result, the country's
    a. production possibilities frontier (PPF) shifted to the right of its PPF prior to the war.
    b. PPF after the war shifted to the left compared to its PPF prior to the war.
    c. PPF after the war remained the same as before the war.
    d. ability to produce goods and services has increased.

ANSWER: b

20. The economy moves from point A, where it produces 100 units of X and 200 units of Y, to point B, where it produces 200 units of X and 150 units of Y. It follows that
    a. point A must be a productive-efficient point.
    b. point A must be a productive-inefficient point.
    c. point A may be a productive-efficient point.
    d. point B must be a productive-efficient point.

ANSWER: c

21. Both country 1 and country 2 are located on their respective production possibilities frontiers (PPFs) for consumer goods and capital goods, but country 1 produces twice the output of both types of goods compared to country 2. 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.

ANSWER: a

22. 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.

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c. a downward-sloping straight line.
d. an upward-sloping straight line.

ANSWER: c

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

ANSWER: c

24. 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. a downward-sloping curve that is bowed inward.
c. an upward-sloping curve.
d. a downward-sloping curve that is bowed outward.

ANSWER: d

25. 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.

ANSWER: b

26. 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, the PPF framework would be irrelevant.
c. All PPFs are downward-sloping straight lines.
d. There are more attainable points than unattainable points in every PPF diagram.

ANSWER: b

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

ANSWER: c

28. Consider two points on the PPF: point A, at which there are 50 apples and 40 pears, and point B, at which there are 46 apples and 41 pears. If the economy is currently at point A, the opportunity cost of moving to point B is

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a. 1 pear.
b. 4 apples.
c. 3 apples.
d. 41 pears.

ANSWER: b

29. Consider two points on a PPF: point A, at which there are 500 oranges and 100 apricots, and point B, at which there are 501 oranges and 95 apricots. If the economy is currently at point B, the opportunity cost of moving to point A is
a. 5 apricots.
b. 1 orange.
c. 95 apricots.
d. 500 oranges.

ANSWER: b

30. 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.

ANSWER: b

31. 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.

ANSWER: b

32. 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.

ANSWER: b

33. 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.

ANSWER: a

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34. 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 productive efficiency.

ANSWER: d

35. 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. unemployment of some productive resources.

ANSWER: d

36. An increase in the quantity of resources available
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.

ANSWER: b

37. 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.

ANSWER: a

38. For each additional lamp produced, a constant opportunity cost is incurred in terms of bookshelves. This means that
a. it takes more resources to produce a lamp than a bookshelf.
b. it takes fewer resources to produce a lamp than a bookshelf.
c. for every lamp produced, a constant number of bookshelves is forfeited.
d. for every lamp produced, a different number of bookshelves is forfeited.

ANSWER: c

39. 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.

ANSWER: a

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40. 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.

ANSWER: c

41. 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.

ANSWER: a

42. Economic growth causes the PPF to
    a. shift inward.
    b. shift outward.
    c. remain constant.
    d. go from a straight line to a curve.

ANSWER: b

43. 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.

ANSWER: c

44. 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.

ANSWER: c

45. 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.

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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.

ANSWER: d

46. 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.

ANSWER: a

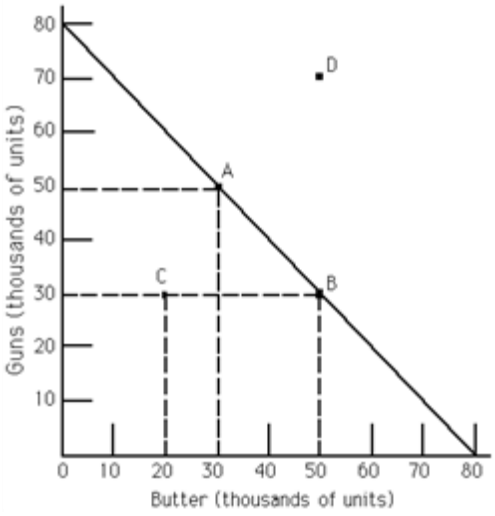
47. Productive efficiency implies that
a. it is impossible to obtain gains in one area without losses in another.
b. it is possible to obtain gains in one area without losses in another.
c. there are too many resources available.
d. there are too few resources available.

ANSWER: a

48. 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. the implementation of a new law that interferes with productive efficiency.

ANSWER: d

Figure 2-1



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Chapter 02 Production Possibilities Frontier Framework

49. **Refer to Figure 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.
ANSWER: a

50. **Refer to Figure 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.
ANSWER: c

51. **Refer to Figure 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.
ANSWER: a

52. **Refer to Figure 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.
ANSWER: a

53. **Refer to Figure 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.
ANSWER: b

54. **Refer to Figure 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.
ANSWER: c

55. **Refer to Figure 2-1.** The opportunity cost of moving from point A to B is
a. 10,000 units of butter.

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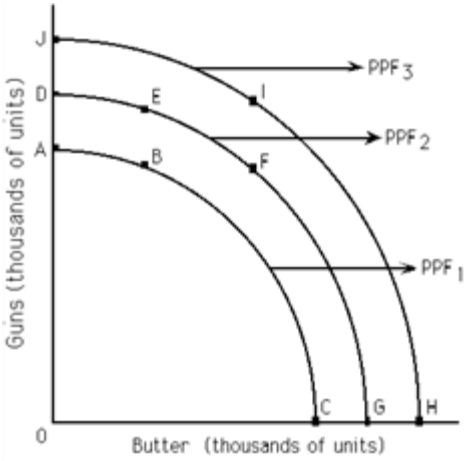
b. 20,000 units of butter.
c. 20,000 units of guns.
d. 10,000 units of guns.

ANSWER: c

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

ANSWER: b

Figure 2-2



57. **Refer to Figure 2-2.** If the economy is operating at PPF_2, then point _____ illustrates productive inefficiency.
a. D
b. F
c. C
d. J

ANSWER: c

58. **Refer to Figure 2-2.** If the economy is operating at PPF_2, then point _____ is unattainable.
a. A
b. G
c. D
d. J

ANSWER: d

59. **Refer to Figure 2-2.** If the economy is operating at PPF_2, then point _____ is productive efficient.

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a. B
b. D
c. I
d. J

ANSWER: b

60. **Refer to Figure 2-2.** If the economy is operating at PPF_2, a significant loss of the quantity of resources available could

a. move this economy from point D to point G on PPF_2.
b. shift this economy to PPF_1.
c. shift this economy to PPF_3.
d. not affect this economy.

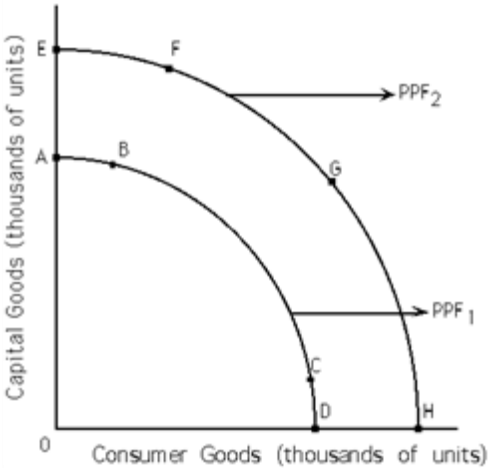
ANSWER: b

61. **Refer to Figure 2-2.** The production possibilities frontiers shown in this figure depict _____ opportunity costs.

a. constant
b. increasing
c. decreasing
d. There is not enough information provided to answer this question.

ANSWER: b

Figure 2-3



62. **Refer to Figure 2-3.** If the economy is operating at PPF_1, the economy may move to PPF_2 as a result of

a. an increase in resources.
b. a decrease in resources.
c. a decrease in technology.
d. a simultaneous decrease in both resources and technology.

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ANSWER: a

63. **Refer to Figure 2-3.** If the economy is operating at PPF_1, the economy can only choose to produce at a point that lies
   a. below PPF_1.
   b. below or on PPF_1.
   c. on PPF_2.
   d. above (beyond) PPF_2.

ANSWER: b

64. **Refer to Figure 2-3.** If the economy is operating at PPF_1, a shift to PPF_2 may depict
   a. economic growth.
   b. a decrease in resources.
   c. a decrease in technology.
   d. a simultaneous decrease in both resources and technology.

ANSWER: a

65. A productive-efficient society
   a. produces at a point below its PPF.
   b. can produce more of one good only by producing less of another good.
   c. can produce unlimited amounts of a good.
   d. does not have to make choices.

ANSWER: b

66. If resources are better suited toward the production of one good than toward another good, then the PPF for those two goods is
   a. a straight line.
   b. bowed outward.
   c. upward sloping.
   d. a vertical line.

ANSWER: b

67. A society is *productive-inefficient* when
   a. it produces at a point on its PPF.
   b. it does not produce the maximum amount of output with its given resources and technology.
   c. it can produce more of one good only by giving up some of another good.
   d. it produces at a point beyond its PPF.

ANSWER: b

68. 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.

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d. not exist.

ANSWER: a

69. 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.

ANSWER: c

70. 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.

ANSWER: b

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

ANSWER: b

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

ANSWER: a

73. 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.

ANSWER: c

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

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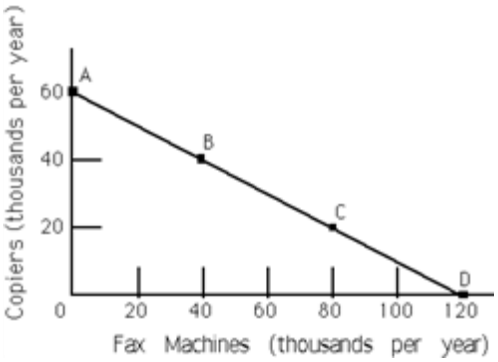
d. less output with a greater quantity of resources.

ANSWER: a

Figure 2-4



75. **Refer to Figure 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.

ANSWER: c

76. **Refer to Figure 2-4.** This economy is
a. productive-efficient, if it operates at point B or C.
b. productive-efficient, if it operates at point A or D.
c. productive-inefficient, if it operates at point A or D.
d. productive-inefficient regardless of the particular point.

ANSWER: b

77. **Refer to Figure 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. 40,000 fax machines.

ANSWER: c

78. **Refer to Figure 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.

ANSWER: c

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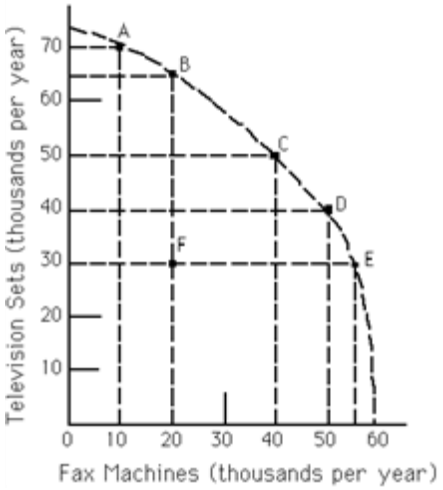
Figure 2-5



79. **Refer to Figure 2-5.** The economy is currently operating at point F. The opportunity cost of moving to point E is approximately _____ televisions.
   a. 35
   b. 55
   c. zero
   d. 40

ANSWER: c

80. **Refer to Figure 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.

ANSWER: a

81. **Refer to Figure 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.

ANSWER: a

82. **Refer to Figure 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.

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d. 10,000 fax machines.

ANSWER: d

83. **Refer to Figure 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.

ANSWER: d

84. **Refer to Figure 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 C.
c. point E to point F.
d. point E to point D.

ANSWER: b

85. **Refer to Figure 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. A, C and E only

ANSWER: a

86. **Refer to Figure 2-5.** Given available resources and technology, this economy can produce 50,000 television sets and 40,000 fax machines only if it chooses to produce at point
a. A.
b. B.
c. C.
d. D.

ANSWER: c

87. Suppose that some of farm fields are being left unused. What can be said about the economy's PPF (with agricultural products on one axis and all other products on the other axis)?
a. The PPF takes into account only the resources that are fully employed.
b. The PPF framework cannot be used if some resources are idle.
c. With unemployed resources, the economy is at a point below (inside) the PPF.
d. With unemployed resources, the economy is at a point above (outside) the PPF.

ANSWER: c

88. Productive efficiency implies that
a. all consumers' wants are satisfied.
b. no advance in technology will occur in the future.

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c. the attainable region is greater than the unattainable region.

d. gains are impossible in one area without losses in another.

ANSWER: d

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

Strategy	Score in Economics	Score in Statistics
1	93	81
2	77	92

The opportunity cost of receiving a 93 on the economics exam is _____ points on the statistics exam.

a. 12

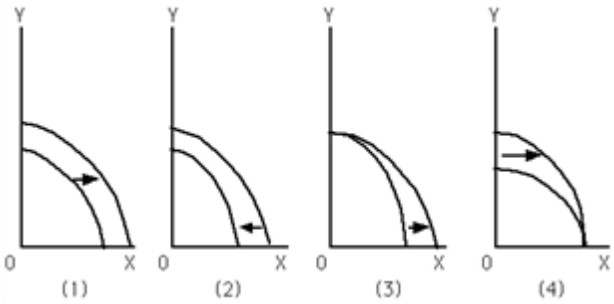
b. 11

c. 15

d. 81

ANSWER: b

Figure 2-6



90. **Refer to Figure 2-6**. Which graph depicts a technological improvement in the production of good Y only?

a. (1)

b. (2)

c. (3)

d. (4)

ANSWER: d

91. **Refer to Figure 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)

ANSWER: a

92. **Refer to Figure 2-6.** Which graph best depicts the consequence of a large-scale natural disaster?

Name:_____ Class:_____ Date:_____

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

ANSWER: b

93. **Refer to Figure 2-6.** Which graph depicts the result of a technological improvement in the production of both goods X and Y?

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

ANSWER: a

94. **Refer to Figure 2-6.** Which graph depicts a technological improvement in the production of good X only?

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

ANSWER: c

95. **Refer to Figure 2-6.** Which graph depicts the result of an increase in the unemployment rate?

a. (1)
b. (2)
c. (3)
d. (4)
e. The result of an increase in the unemployment rate is not depicted by any of the graphs shown here.

ANSWER: e

96. **Refer to Figure 2-6.** Which graph depicts the result of a decrease in the unemployment rate?

a. (1)
b. (2)
c. (3)
d. (4)
e. The result of a decrease in the unemployment rate is not represented by any of the graphs depicted here.

ANSWER: e

97. **Refer to Figure 2-6.** Which graph depicts the result of an increase in the number of immigrants entering the country in order to work?

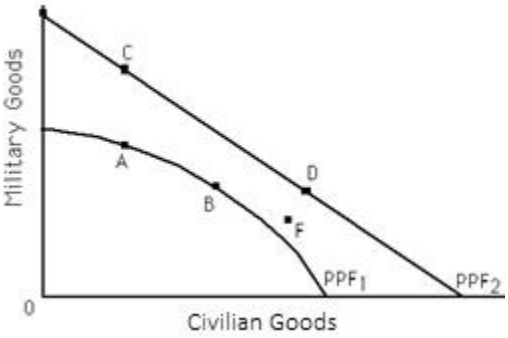
a. (1)
b. (2)
c. (3)
d. (4)

ANSWER: a

Name:_____ Class:_____ Date:_____

Chapter 02 Production Possibilities Frontier Framework

Figure 2-7



98. **Refer to Figure 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. Point F is more efficient than point D.

ANSWER: b

99. **Refer to Figure 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

ANSWER: c

100. **Refer to Figure 2-7.** Point F is
   a. unattainable if the economy is at PPF_1.
   b. efficient if the economy is at PPF_2.
   c. unattainable if the economy is at PPF_2.
   d. efficient if the economy is at PPF_1.

ANSWER: a

101. **Refer to Figure 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

Name:_____ Class:_____ Date:_____

d. A movement from B to A

ANSWER: d

102. Along its production possibilities frontier (PPF) an economy can produce 0X and 15Y, 10X and 10Y, 20X and 5Y, or 30X and 0Y. It follows that the PPF is

a. a downward-sloping straight line.

b. an upward-sloping straight line.

c. a downward-sloping bowed-outward curve.

d. a downward-sloping bowed-inward curve.

ANSWER: a

103. If the economy is producing at a point on its production possibilities frontier (PPF), the economy is

a. productive-inefficient.

b. operating with some unemployed resources.

c. productive-efficient.

d. producing at a point that is unattainable.

ANSWER: c

104. Points inside (below) the production possibilities frontier (PPF) are

a. unattainable.

b. attainable and productive inefficient.

c. preferable to points that lie on the PPF.

d. attainable and productive efficient.

ANSWER: b

105. 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

ANSWER: d

106. 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

ANSWER: d

107. Suppose an economy can produce a maximum of 10 units of good X and the opportunity cost of 1X is always 2Y. What is the maximum number of units of good Y the economy can produce?

a. 10

Name:_____ Class:_____ Date:_____

b. 200
c. 20
d. 500

ANSWER: c

108. 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, lies on the economy's production possibilities frontier?

a. 700 units of X and 280 units of Y
b. 600 units of X and 250 units of Y
c. 400 units of X and 150 units of Y
d. 90 units of X and 360 units of Y

ANSWER: a

109. 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

ANSWER: d

110. 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 outward-shifting PPF.
b. incorrect if he is assuming a outward-shifting PPF.
c. correct if he is assuming a inward-shifting PPF.
d. correct if he is assuming a PPF that does not change.

ANSWER: a

111. 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.

ANSWER: c

112. An economy is producing goods X and Y and is currently at its PPF. When the economy is producing 100 units of good X, the opportunity cost of 1X is 3Y. If good X is produced at increasing opportunity costs, then when the economy moves along the same PPF to produce 120X, the opportunity cost of 1X could be _____Y.

a. 4
b. 2.5
c. 2
d. 1

Name:_____ Class:_____ Date:_____

ANSWER: a

113. 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.

ANSWER: b

114. 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.

ANSWER: b

115. 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
a. lower than 5Y.
b. exactly 0.5Y.
c. higher than 5Y.
d. lower than 1/5Y but higher than zero.

ANSWER: c

116. 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.

ANSWER: c

117. 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.

ANSWER: a

Name:_____ Class:_____ Date:_____

118. The economy was at point A producing 100X and 200Y. It then moves 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 inward 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. the economy moved from an unattainable point to an attainable point.

ANSWER: a

119. 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.

ANSWER: b

120. *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.

ANSWER: c

121. 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.

ANSWER: b

122. 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

ANSWER: c

123. 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.

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c. inside (below) its PPF.

d. at a productive efficient point.

ANSWER: c

124. 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 lower 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.

ANSWER: b

125. If Luke can bake bread at a lower opportunity cost than Jason, and Jason can produce paintings at a lower opportunity cost than Luke, it follows that

a. Luke has a comparative advantage in paintings and Jason has a comparative advantage in baking bread.

b. Both Luke and Jason have a comparative advantage in baking bread.

c. Both Luke and Jason have a comparative disadvantage in producing paintings.

d. Luke has a comparative advantage in baking bread and Jason has a comparative advantage in producing paintings.

ANSWER: d

126. 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.

ANSWER: a

127. 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.

ANSWER: a

128. 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.

Name:_____ Class:_____ Date:_____

ANSWER: b

129. 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

ANSWER: c

130. A combination of Andrea's grades is a point on a PPF for two courses she is currently taking. Suppose that her PPF shifts inward. Which of the following situations are impossible given the new PPF?

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

ANSWER: b

131. Suppose Andrea is taking just two courses and is at a point inside (or below) her PPF of grades for those two courses. If Andrea becomes more efficient in her study habits then it is impossible for _____, *ceteris paribus.*

a. either one of her grades to rise
b. both of her grades to rise
c. one grade to rise and the other grade to fall
d. both of her grades to fall

ANSWER: d

132. 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.

ANSWER: d

Table 2-8

Good X (Maria)	Good Y (Maria)	Good X (Anna)	Good Y (Anna)
90	0	60	0
60	30	40	10
30	60	20	20
0	90	0	30

Name:_____ Class:_____ Date:_____

133. **Refer to Table 2-8.** Who has the comparative advantage in the production of good X?
a. Maria
b. Anna
c. Both Maria and Anna
d. Neither Maria nor Anna
ANSWER: b

134. **Refer to Table 2-8.** Who has the comparative advantage in the production of good Y?
a. Maria
b. Anna
c. Both Maria and Anna
d. Neither Maria nor Anna
ANSWER: a

135. **Refer to Table 2-8.** If Maria and Anna 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 Anna,
b. Anna, but not Maria,
c. both Maria and Anna
d. neither Maria nor Anna
ANSWER: c

136. **Refer to Table 2-8.** For Anna, 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
ANSWER: d

137. **Refer to Table 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
ANSWER: b

138. **Refer to Table 2-8.** For Anna, 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

Name:_____ Class:_____ Date:_____

ANSWER: a

139. **Refer to Table 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

ANSWER: b

Table 2-1

Good A (Alex)	Good B (Alex)	Good A (Adam)	Good B (Adam)
0	300	0	160
25	225	30	120
50	150	60	80
75	75	90	40
100	0	120	0

140. **Refer to Table 2-1**. 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

ANSWER: b

141. **Refer to Table 2-1.** 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

ANSWER: a

142. **Refer to Table 2-1.** 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 their PPF.

a. Alex, but not Adam,
b. Adam, but not Alex
c. Alex and Adam
d. Neither Alex nor Adam

ANSWER: c

143. **Refer to Table 2-1.** 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

ANSWER: a

144. **Refer to Table 2-1.** 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

ANSWER: b

145. **Refer to Table 2-1.** 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

ANSWER: c

146. **Refer to Table 2-1.** 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

ANSWER: d

Table 2-2

Good X (Person A)	Good Y (Person A)
200	0
150	50
100	100
50	150
0	200

Good X (Person B)	Good Y (Person B)
0	160
40	120
80	80

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120	40
160	0

147. **Refer Table 2-2.** Person A has the comparative advantage in the production of _____ and person B has the comparative advantage in the production of _____.

a. X; Y

b. Y; X

c. neither good X nor good Y; neither good X nor good Y

d. both good X and good Y; neither good X nor good Y

ANSWER: c

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

a. There would be no gains from trade between person A and person B because the opportunity cost of producing one unit of good X (or one unit of good Y) is the same for both persons.

b. Both person A and person B will benefit from specialization and trade as long as person A specializes in the production of good X and person B specializes in the production of good Y.

c. Both person A and person B will benefit from specialization and trade as long as person A specializes in the production of good Y and person B specializes in the production of good X.

d. Both person A and person B will benefit from trade as long as person A produces both good X and good Y, and person B produces neither good.

ANSWER: a

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

Strategy	Score in Economics	Score in Statistics
1	93	81
2	77	92

The opportunity cost of receiving a 92 on the statistics exam is _____ points on the economics exam.

a. 12

b. 11

c. 16

d. 77

ANSWER: c

150. The economy can produce 0X and 15Y, 10X and 10Y, 20X and 5Y, or 30X and 0Y. It follows that opportunity cost of 1X is ___Y.

a. 5.0

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b. 0.5
c. 2.5
d. 1.0

ANSWER: b

151. The endpoints of an economy's production possibilities frontier (PPF) for goods X and Y are: (2,000X, 0Y) and (0X, 500Y). Furthermore, the opportunity cost between these two goods is always constant. Which of the following combinations of the two goods, X and Y, lies on the economy's PPF?

a. 400 units of X and 200 units of Y
b. 600 units of X and 250 units of Y
c. 400 units of X and 150 units of Y
d. 1,000 units of X and 250 units of Y

ANSWER: d

Essay

152. 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?

ANSWER: 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.

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

ANSWER: 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.

154. 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.

ANSWER: 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.

155. Explain what *productive efficiency* means. Describe how productive efficiency is represented by a PPF.

ANSWER: 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.

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156. 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.

ANSWER: 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.

157. 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.

ANSWER: 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.