MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) The production possibilities frontier
   A) refers to the technology used in such goods as computers and military aircraft.
   B) marks the boundary between attainable combinations of goods and services and unattainable combinations.
   C) once applied to U.S. technology but now refers to Japanese technology.
   D) is also called the supply curve.

2) The production possibilities frontier is the boundary between
   A) those combinations of goods and services that can be produced and those that can be consumed.
   B) those combinations of goods and services that can be produced and those that cannot.
   C) those resources that are limited and those that are unlimited.
   D) those wants that are limited and those that are unlimited.

3) The production possibilities frontier is the boundary between those combinations of goods and services that can be
   A) produced and those that can be consumed.
   B) consumed domestically and those that can be consumed by foreigners.
   C) consumed and those that cannot be produced.
   D) produced and those that cannot be produced.

4) The production possibilities frontier is
   A) downward sloping and reflects tradeoffs in choices.
   B) downward sloping and reflects unlimited choices.
   C) upward sloping and reflects tradeoffs in choices.
   D) upward sloping and reflects unlimited choices.

5) The production possibilities frontier
   A) depicts the boundary between those combinations of goods and services that can be produced and those that cannot given resources and the current state of technology.
   B) shows how many goods and services are consumed by each person in a country.
   C) is a graph with price on the vertical axis and income on the horizontal axis.
   D) is a model that assumes there is no scarcity and no opportunity cost.

6) The production possibilities frontier illustrates
   A) all goods that can be produced by an economy.
   B) all goods and services that are desired but cannot be produced due to scarce resources.
   C) the combination of goods and services that can be produced efficiently.
   D) all possible production of capital goods.

7) The production possibilities frontier represents
   A) the maximum levels of production that can be attained.
   B) the maximum amount of resources available at any given time.
   C) combinations of goods and services that do not fully use available resources.
   D) the maximum rate of growth of output possible for an economy.
8) A production possibilities frontier does NOT illustrate
   A) attainable and unattainable points.
   B) the exchange of one good or service for another.
   C) the limits on production imposed by our limited resources and technology.
   D) opportunity cost.

9) Any production point outside the production possibilities frontier
   A) is attainable only if prices fall. B) is associated with unused resources.
   C) is attainable only if prices rise. D) is unattainable.

10) Which of the following statements regarding the production possibilities frontier is true?
    A) Points on the frontier are less efficient than points inside the frontier.
    B) Points inside the frontier are attainable.
    C) Points outside the frontier are attainable.
    D) None of the above because all of the above statements are false.

11) Jane produces only corn and cloth. Taking account of her preferences for corn and cloth
    A) makes her production possibilities frontier straighter.
    B) does not affect her production possibilities frontier.
    C) makes her production possibilities frontier flatter.
    D) makes her production possibilities frontier steeper.

12) On the vertical axis, the production possibilities frontier shows ________; on the horizontal axis, the production possibilities frontier shows ________.
    A) the quantity of a good; a weighted average of resources used to produce the good
    B) the quantity of a good; the number of workers employed to produce the good
    C) the quantity of a good; the price of the good
    D) the quantity of one good; the quantity of another good

13) Scarcity is represented on the production possibilities frontier by
    A) the fact that there are only two goods in the diagram.
    B) technological progress.
    C) the amount of the good on the horizontal axis forgone.
    D) the fact there are attainable and unattainable points.
14) The above figure illustrates that if this country wishes to move from its current production point (labeled "Current") and have 10 more tons of food, it can do this by producing
   A) 10 more tons of clothing. B) 5 fewer tons of clothing. C) 5 more tons of clothing. D) 10 fewer tons of clothing.

15) A point inside a production possibilities frontier
   A) implies that too much capital and not enough labor are being used. B) is more efficient than points on the production possibilities frontier. C) could indicate that some resources are unemployed. D) is unattainable.

16) A point inside a production possibilities frontier
   A) could indicate that resources are misallocated. B) implies that too much labor and not enough capital is being used. C) is more efficient than a point on the production possibilities frontier. D) reflects the fact that more technology needs to be developed to fully employ all resources.

17) When resources are assigned to inappropriate tasks, that is, tasks for which they are not the best match, the result will be producing at a point
   A) outside the PPF. B) where the slope of the PPF is zero. C) inside the PPF. D) where the slope of the PPF is positive.

18) Production efficiency requires that
   A) we are producing at a point on the PPF. B) resources be assigned to the task for which they are the best match. C) we cannot produce more of one good without producing less of some other good. D) All of the above answers are correct.
19) Sam’s production possibilities frontier has good \( A \) on the horizontal axis and good \( B \) on the vertical axis. If Sam is producing at a point \textit{inside} his frontier, then he
A) can increase production of both goods with no increase in resources.
B) values good \( A \) more than good \( B \).
C) values good \( B \) more than good \( A \).
D) is fully using all his resources.

20) A situation in which some resources are \textbf{NOT} fully utilized is represented in a production possibilities frontier diagram by
A) a point inside the production possibilities frontier.
B) the midpoint of the production possibilities frontier.
C) a point outside the production possibilities frontier.
D) any point on either the horizontal or the vertical axis.

21) Production points inside the production possibilities frontier
A) are associated with unused or misallocated resources.
B) result in more rapid growth.
C) are unattainable.
D) are attainable only with the full utilization of all resources.

22) A nation produces at a point inside its \textit{PPF}
A) when it produces inefficiently.
B) never.
C) when it trades with other nations.
D) when its \textit{PPF} is bowed out.

23) Refer to the production possibilities frontier in the figure above. Which point indicates that resources are \textbf{NOT} fully utilized or are misallocated?
A) point \( a \)  
B) point \( b \)
C) point \( c \)
D) point \( e \)

24) Refer to the production possibilities frontier in the figure above. Which point is unattainable?
A) point \( a \)
B) point \( b \)
C) point \( c \)
D) point \( e \)
25) Refer to the production possibilities frontier in the figure above. Point ________ represents an ________ point.
   A) b; unattainable  B) c; unattainable  C) c; inefficient  D) e; inefficient

26) In the figure above, moving from point d to point a requires
   A) technological change.
   B) a decrease in unemployment.
   C) both capital accumulation and a decrease in unemployment.
   D) decreasing the output of consumer goods in order to boost the output of capital goods.

27) Refer to the production possibilities frontier in the figure above. Suppose a country is at point a.
    A movement to point ________ means that the country ________.
    A) d; must give up 20 million capital goods  B) d; gives up 10 million consumer goods
    C) b; is producing at an inefficient point  D) e; is not operating efficiently

28) Refer to the production possibilities frontier in the figure above. If the country moves from point a to point c, the opportunity cost of the move is
    A) 10 million capital goods.  B) 30 million capital goods.
    C) 10 million consumption goods.  D) 20 million capital goods.

29) Some time ago the government of China required many highly skilled technicians and scientists to engage in unskilled agricultural labor in order to develop "proper social attitudes.” This policy probably caused China to produce
   A) at an inappropriate point along its production possibilities frontier.
   B) inside its production possibilities frontier.
   C) outside its production possibilities frontier with respect to food, but inside with respect to high-technology goods.
   D) inside its production possibilities frontier with respect to food, but outside with respect to high-technology goods.

30) Production efficiency is achieved
   A) when all goods and services desired by consumers can be produced in the economy.
   B) when the ability is gained to produce goods and services that are desired beyond the PPF boundary.
   C) when producing inside the production possibilities frontier.
   D) when it producing one more unit of one good cannot occur without producing less of some other good.

31) A society that is producing on its production possibilities frontier is
   A) fully utilizing all of its productive resources.
   B) not being technologically efficient.
   C) not utilizing all of its resources.
   D) producing too much output.
32) If a country must decrease current consumption to increase the amount of capital goods it produces today, then it
   A) must not have private ownership of property and will have to follow planning authorities decisions today and in the future.
   B) must be producing along the production possibilities frontier today and will see a shift outward of the frontier in the future if produces more capital goods.
   C) must be using resources inefficiently today, but will be more efficient in the future.
   D) must be producing outside the production possibilities frontier and will continue to do so in the future.

33) If production of two goods is currently at levels such that we are inside the production possibilities frontier
   A) in order to produce more of one good, we must produce less of the other.
   B) it is not possible to produce more of both goods.
   C) we are in the "unattainable" region.
   D) production is inefficient.

34) Using the production possibilities frontier model, unemployment is described as producing at a
   A) on the exact middle of the PPF curve.
   B) inside the PPF curve.
   C) outside the PPF curve.
   D) on either end of the PPF curve.

35) If a society is operating at a point inside its production possibilities frontier, then this society’s
   A) resources are being inefficiently utilized.
   B) resources are being used in the most efficient manner.
   C) production possibilities frontier will shift rightward.
   D) economy will grow too fast.
36) Point C on the production possibilities frontier in the above diagram illustrates
   A) a point with maximum and efficient production of Goods A and Goods B.
   B) an underutilization of resources.
   C) all goods and services that are desired but cannot be produced due to scarce resources.
   D) a combination of goods and services that cannot be produced efficiently.

37) In the above figure, which point represents an unattainable production combination of the two goods?
   A) point N  B) point L  C) point C  D) point D

38) In the above figure, which point represents an attainable but inefficient production point?
   A) point N  B) point C  C) point D  D) point L

39) A tradeoff is
   A) a constraint that requires giving up one thing to get another.
   B) represented by a point outside a PPF.
   C) a transaction at a price either above or below the equilibrium price.
   D) represented by a point inside a PPF.

40) A tradeoff is illustrated by
   A) a change in the slope of the PPF.  B) a point inside the PPF.
   C) the negative slope of the PPF.  D) a point outside the PPF.

41) When we choose a particular option, we must give up alternative options. The highest-valued alternative forgone is the
   A) opportunity cost of the option chosen.
   B) comparative advantage of the option chosen.
   C) absolute advantage.
   D) nonmonetary cost of the option chosen.
42) Ted can study for his economics exam or go to a concert. He decides to study for his economics exam instead of going to the concert. The concert he will miss is Ted's ________ of studying for the exam.

A) discretionary cost  B) implicit cost  C) opportunity cost  D) explicit cost

43) Most students attending college pay tuition and are unable to hold a full-time job. For these students, tuition is ________.

A) part of the opportunity cost of going to college. So are their forgone earnings from not holding a full-time job.
B) part of the opportunity cost of going to college. Their forgone earnings from not holding a full-time job are not.
C) not part of the opportunity cost of going to college. Neither are their forgone earnings from not holding a full-time job.
D) not part of the opportunity cost of going to college, but their forgone earnings from not holding a full-time job are.

44) Opportunity cost is ________.

A) the monetary cost.  B) the highest-valued alternative forgone.  C) the indirect cost.  D) the best choice that can be made.

45) On a diagram of a production possibilities frontier, opportunity cost is represented by ________.

A) a point on the horizontal axis.  B) a ray through the origin.  C) a point on the vertical axis.  D) the slope of the production possibilities frontier, which indicates that to get more of one good requires less of another.

46) If additional units of a good could be produced at a constant opportunity cost, the production possibilities frontier would be ________.

A) bowed outward.  B) positively sloped.  C) bowed inward.  D) a straight line.

47) If Sam is producing at a point on his production possibilities frontier, then he ________.

A) cannot produce any more of either good.  B) will be unable to gain from trade.  C) is not subject to scarcity.  D) can produce more of one good only by producing less of the other.
### Production of Grain and Cars

<table>
<thead>
<tr>
<th>Point</th>
<th>Production of grain (tons)</th>
<th>Production of cars (cars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>D</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>E</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>F</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

48) The table above lists six points on the production possibilities frontier for grain and cars. Given this information, which of the following combinations is unattainable?

A) 4 tons of grain and 26 cars.  
B) 2 tons of grain and 27 cars.  
C) 6 tons of grain and 18 cars.  
D) 7 tons of grain and 10 cars.

49) The table above lists six points on the production possibilities frontier for grain and cars. From this information you can conclude that production is inefficient if this economy produces

A) 4 tons of grain and 26 cars.  
B) 2 tons of grain and 27 cars.  
C) 8 tons of grain and 10 cars.  
D) 6 tons of grain and 18 cars.

50) The table above lists six points on the production possibilities frontier for grain and cars. What is the opportunity cost of producing the 5th ton of grain?

A) 2 cars  
B) 3 cars  
C) 16 cars  
D) 6 cars

51) The table above lists six points on the production possibilities frontier for grain and cars. What is the opportunity cost of producing the 26th car?

A) 4 tons of grain  
B) 0.25 tons of grain  
C) 0.5 tons of grain  
D) 2 tons of grain

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### Production of Chocolate Bars and Cans of Cola

<table>
<thead>
<tr>
<th>Point</th>
<th>Production of chocolate bars</th>
<th>Production of cans of cola</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
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<td>C</td>
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<td>70</td>
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<td>D</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>E</td>
<td>40</td>
<td>0</td>
</tr>
</tbody>
</table>

52) The above table shows production points on Sweet-Tooth Land’s production possibilities frontier. Which of the following statements is TRUE?

A) Producing 20 chocolate bars and 80 cans of cola is attainable, but inefficient.  
B) Producing 30 chocolate bars and 38 cans of cola is only attainable with an increase in technology.  
C) Producing 40 chocolate bars and 0 cans of cola is unattainable and inefficient.  
D) Producing 0 chocolate bars and 100 cans of cola is both attainable and efficient.
53) The above table shows production points on Sweet-Tooth Land’s production possibilities frontier. Which of the following is an example of a point that is inefficient?
A) 20 chocolate bars and 80 cans of cola  
B) 0 chocolate bars and 100 cans of cola  
C) 32 chocolate bars and 40 cans of cola  
D) 38 chocolate bars and 0 cans of cola

54) The above table shows production points on Sweet-Tooth Land’s production possibilities frontier. What is the opportunity cost of one chocolate bar if Sweet-tooth Land moves from point C to point D?
A) 30 cans of cola  
B) 3 cans of cola  
C) 1/3 can of cola  
D) 10 cans of cola

55) The above table shows production points on Sweet-Tooth Land’s production possibilities frontier. What is the opportunity cost of one can of cola if Sweet-tooth Land moves from point C to point B?
A) 2 chocolate bars  
B) 10 chocolate bars  
C) 1/2 chocolate bar  
D) 20 chocolate bars

56) The above table shows production points on Sweet-Tooth Land’s production possibilities frontier. A movement from ________ represents the greatest opportunity cost of increasing cola production.
A) point C to point B  
B) point D to point C  
C) point B to point A  
D) point E to point D

<table>
<thead>
<tr>
<th>Point</th>
<th>Production of X</th>
<th>Production of Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
<td>36</td>
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<tr>
<td>C</td>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>D</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>E</td>
<td>12</td>
<td>0</td>
</tr>
</tbody>
</table>

57) The above table shows production combinations on a country’s production possibilities frontier. Which of the following is an example of a point that is unattainable?
A) 10 units of good X and 16 units of good Y 
B) 6 units of good X and 28 units of good Y 
C) 3 units of good X and 35 units of good Y 
D) 0 units of good X and 40 units of good Y

58) The above table shows production combinations on a country’s production possibilities frontier. Which of the following is an example of a production point that is inefficient?
A) 6 units of good X and 28 units of good Y 
B) 10 units of good X and 16 units of good Y 
C) 0 units of good X and 40 units of good Y 
D) 3 units of good X and 35 units of good Y

59) The above table shows production combinations on a country’s production possibilities frontier. Which of the following points signifies efficient production?
A) 12 units of good X and 1 unit of good Y 
B) 10 units of good X and 16 units of good Y 
C) 0 units of good X and 40 units of good Y 
D) 3 units of good X and 25 units of good Y
60) The above table shows production combinations on a country’s production possibilities
frontier. What is the opportunity cost of increasing the production of Y from 16 to 28 units?
A) 3 units of good X
B) 6 units of good X
C) 12 units of good X
D) There is no opportunity cost when moving from one point to another along a production possibilities frontier.

61) The above table shows production combinations on a country’s production possibilities
frontier. What is the opportunity cost of one unit of Y when the production of good Y increases
from 16 to 28 units?
A) 4 units of good X
B) 1/4 unit of good X
C) 3 units of good X
D) There is no opportunity cost when moving from one point to another along a production possibilities frontier.

62) The above table shows production combinations on a country’s production possibilities
frontier. What is the opportunity cost of increasing the production of X from 0 to 3 units?
A) 0 units of good Y
B) 40 units of good Y
C) 4/3 units of good Y for every one unit of good X
D) 3 units of good Y

63) The above table shows production combinations on a country’s production possibilities
frontier. A movement from ________ involves the greatest opportunity cost of increasing the
production of good Y.
A) point B to point A  B) point D to point C
C) point C to point B  D) point E to point D

<table>
<thead>
<tr>
<th>Point</th>
<th>Production of cheese (tons)</th>
<th>Production of wine (gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
<td>1,000</td>
</tr>
<tr>
<td>B</td>
<td>250</td>
<td>900</td>
</tr>
<tr>
<td>C</td>
<td>500</td>
<td>700</td>
</tr>
<tr>
<td>D</td>
<td>750</td>
<td>400</td>
</tr>
<tr>
<td>E</td>
<td>1,000</td>
<td>0</td>
</tr>
</tbody>
</table>

64) The above table shows the production possibilities frontier for the economy of Arkadia. The
opportunity cost of increasing cheese production from 500 (tons of) cheese to 750 (tons of)
cheese is
A) 700 gallons of wine.  B) 250 tons of cheese.
C) 300 gallons of wine.  D) 100 gallons of wine.
65) Suppose that, for given resources and production technology, the above table is an accurate description of the production relationship between soda and pizza. For the sake of simplicity we assume the relationship is linear. Which of the following production possibilities is not attainable?
   A) 40 sodas, 0 pizzas
   B) 15 sodas, 5 pizzas
   C) 5 sodas, 10 pizzas
   D) All of the above possibilities are attainable.

66) Suppose that, for given resources and production technology, the above table is an accurate description of the production relationship between soda and pizza. For the sake of simplicity we assume the relationship is linear. Based on what you know about production possibilities frontier, which of the following production possibilities is not efficient?
   A) 20 sodas and 5 pizzas
   B) 12 sodas and 10 pizzas
   C) 28 sodas and 3 pizzas
   D) 15 sodas and 5 pizzas

67) Suppose that, for given resources and production technology, the above table is an accurate description of the production relationship between soda and pizza. For the sake of simplicity we assume the relationship is linear. What is the opportunity cost of producing an additional unit of pizza?
   A) 1 pizza
   B) 3 sodas
   C) 4 sodas
   D) cannot be calculated with the information provided (the prices for both products are not given)
68) Consider the PPF for milk and corn in the above figure. If currently no corn is being produced, what is the total opportunity cost of producing another 2 bushels of corn?
   A) 4 gallons of milk  
   B) nothing  
   C) 2 bushels of corn  
   D) 1 gallon of milk

69) The bowed outward shape of the production possibilities frontier in the above figure indicates that
   A) the opportunity cost of producing more computers decreases as more computers are produced.
   B) some resources are better suited for producing computers.
   C) computer technology is subject to the principle of decreasing costs.
   D) All of the above answers are correct.
70) According to the figure above, the opportunity cost of producing another computer is
A) higher at B.
B) higher at A.
C) different at most points along the frontier but equal at points A and B because they are equally distant from the axes.
D) the same at every point along the frontier.

71) Consider the PPF for office buildings and housing shown in the figure above. Which point in the diagram shows that resources to produce office buildings and housing are being misallocated, unused, or both?
A) point G
B) point F
C) point H
D) point I

72) Opportunity cost is represented on the production possibilities frontier by
A) the amount of good Y forgone when more of good X is produced.
B) efficient and inefficient points.
C) technological progress.
D) attainable and unattainable points.

73) At one point along a PPF, 50 tons of coffee and 100 tons of bananas are produced. At another point along the same PPF, 30 tons of coffee and 140 tons of bananas are produced. The opportunity cost of a ton of coffee between these points is
A) $7/5$ of a ton of bananas.
B) $5/7$ of a ton of bananas.
C) 2 tons of bananas.
D) $1/2$ of a ton of bananas.
74) In the production possibilities frontier depicted in the figure above, which of the following combinations of hats and bananas is unattainable?
   A) 1 million pounds of bananas and 3 million hats
   B) 2 million pounds of bananas and 5 million hats
   C) 0 million pounds of bananas and 6 million hats
   D) 4 million pounds of bananas and 4 million hats

75) In the production possibilities frontier depicted in the figure above, which of the following combinations of hats and bananas is inefficient?
   A) 4 million pounds of bananas and 4 million hats
   B) 1 million pounds of bananas and 3 million hats
   C) 0 million pounds of bananas and 6 million hats
   D) 2 million pounds of bananas and 5 million hats

76) In the production possibilities frontier depicted in the figure above, which of the following combinations of hats and bananas is generated by an efficient allocation of resources (no misallocated resources)?
   A) 0 million pounds of bananas and 6 million hats
   B) 2 million pounds of bananas and 5 million hats
   C) 3 million pounds of bananas and 4 million hats
   D) All of the above combinations are efficient.

77) In the production possibilities frontier depicted in the figure above, what is the opportunity cost of increasing the production of bananas from two million pounds to three million pounds?
   A) 3 million hats
   B) 2 million hats
   C) 1/2 million hats
   D) 1 million hats
78) Jane produces only corn, measured in tons, and cloth, measured in bolts. For her, the opportunity cost of one more ton of corn is
A) the ratio of the acres of land she uses to graze sheep to the acres she uses to grow corn.
B) the same as the opportunity cost of one more bolt of cloth.
C) the ratio of all the bolts of cloth she produces to all the tons of corn she produces.
D) the inverse of the opportunity cost of one more bolt of cloth.

79) The principle of increasing opportunity cost leads to
A) a production possibilities frontier (PPF) that is bowed outward from the origin.
B) an outward shift of the production possibilities frontier (PPF).
C) an inward shift of the production possibilities frontier (PPF).
D) a production possibilities frontier (PPF) that is bowed inward from the origin.

80) A PPF bows outward because
A) resources are used inefficiently.
B) entrepreneurial talent is more abundant than human capital.
C) not all resources are equally productive in all activities.
D) consumers prefer about equal amounts of the different goods.

81) A PPF, such as the one above, that bows outward illustrates
A) increasing opportunity cost.  B) that technology is improving.
C) that productivity is falling.  D) decreasing opportunity cost.

82) In the figure above,
A) opportunity costs are decreasing.
B) production at point b is efficient whereas production at point a is not efficient.
C) some resources must be unemployed at point c.
D) moving from point a to point b would require new technology.
83) As we increase the production of computers, we find that we must give up larger and larger amounts of DVD players per computer.
   A) DVD players will be more highly regarded by consumers than computers.
   B) As a result, we should specialize in the production of DVD players.
   C) This situation illustrates increasing opportunity cost.
   D) The production possibilities frontier for computers and DVD players is a straight line.

84) As output moves from point a to point b to point c along the PPF in the above figure, the opportunity cost of one more unit of good X
   A) falls. The opportunity cost of one more unit of good Y rises.
   B) rises. The opportunity cost of one more unit of good Y also rises.
   C) rises. The opportunity cost of one more unit of good Y falls.
   D) falls. The opportunity cost of one more unit of good Y also falls.

85) Refer to the production possibilities frontier in the figure above. More of good X must be given up per unit of good Y gained when moving from point b to point a than when moving from point c to point b. This fact
   A) illustrates decreasing opportunity cost.
   B) indicates that good X is more capital intensive than good Y.
   C) illustrates increasing opportunity cost.
   D) indicates that good Y is more capital intensive than good X.

86) When the production possibilities frontier bows outward from the origin,
   A) opportunity costs are decreasing.
   B) opportunity costs are constant.
   C) some of society's resources are unemployed.
   D) opportunity costs are increasing.
87) The slope of a production possibilities frontier that displays increasing opportunity cost is
   A) negative and constant.
   B) steeper near the horizontal intercept than near the vertical intercept.
   C) positive and constant.
   D) steeper near the vertical intercept than near the horizontal intercept.

88) The fact that individual productive resources are NOT equally useful in all activities
   A) implies that gain from specialization and trade is unlikely.
   B) implies a linear production possibilities frontier.
   C) follows from the law of demand.
   D) implies that a production possibilities frontier will be bowed outward.

89) The figure above illustrates Mary’s production possibilities frontier. If Mary wants to move from point b to point c, she must
   A) give up some of good Y in order to obtain more of good X.
   B) improve technology.
   C) increase the accumulation of capital.
   D) give up some of good X in order to obtain more of good Y.

90) The above figure illustrates Mary’s production possibilities frontier. If Mary wants to move from point d to point c, she must
   A) give up some of good Y in order to obtain more of good X.
   B) give up some of good X in order to obtain more of good Y.
   C) improve technology.
   D) increase her accumulation of capital.

91) The above figure illustrates Mary’s production possibilities frontier. Which of the following movements show opportunity costs increasing?
   A) point a to point b to point c  
   B) point c to point f to point d
   C) point f to point a  
   D) point a to point f
92) Refer to the production possibilities frontier figure above. Which of the following movements requires the largest opportunity cost, in terms of good X forgone, per extra unit of good Y?

A) from point c to point b
B) from point b to point a
C) from point d to point c
D) from point e to point d

93) Refer to the production possibilities frontier in the figure above. Which of the following movements requires the largest opportunity cost, in terms of good Y forgone, per extra unit of good X?

A) from point c to point d
B) from point d to point e
C) from point a to point b
D) from point b to point c

94) Refer to the table above, which gives five points on a nation’s PPF. The production of 7 units of X and 28 units of Y is

A) possible but leaves some resources less than fully used or misallocated.
B) impossible given the available resources.
C) on the production possibilities frontier between points b and c.
D) on the production possibilities frontier between points c and d.

95) Refer to the table above, which describes a nation’s PPF. What does point c mean?

A) If 8 units of X are produced, then 28 or more units of Y can be produced.
B) The opportunity cost of one less unit of X is 3.5 units of Y.
C) If 8 units of X are produced, then at most 28 units of Y can be produced.
D) The opportunity cost of one more unit of X is 3.5 units of Y.

96) Refer to the table above, which gives five points on a nation’s PPF. The opportunity cost of increasing the production of X from 8 to 12 units is a total of

A) 8 units of Y.
B) 12 units of Y.
C) 3.5 units of Y.
D) 1.33 units of Y.

97) Refer to the table above, which gives five points on a nation’s PPF. The opportunity cost of increasing the production of Y from 16 to 36 units is a total of

A) 8 units of X.
B) 10 units of X.
C) 12 units of X.
D) 4 units of X.

98) Refer to the table above, which gives five points on a nation’s PPF. As we increase the production of X,

A) the opportunity cost of each new unit of X increases.
B) the opportunity cost of each new unit of X decreases.
C) unemployment increases.
D) the output of Y increases.

Point | Production of X | Production of Y
--- | --- | ---
a | 0 | 40
b | 4 | 36
c | 8 | 28
d | 12 | 16
e | 16 | 0
99) Refer to the table above, which gives five points on a nation’s PPF. The numbers in the table demonstrate that
A) the economy illustrated has a comparative advantage in X.
B) the opportunity cost of producing an additional unit of Y increases as the production of Y increases.
C) the economy illustrated has a comparative advantage in Y.
D) the opportunity cost of producing an additional unit of Y decreases as the production of Y increases.

100) Tom Petty excels at producing rock videos. Tom Clancy excels at writing military novels. The difference in their skills is one reason why the production possibilities frontier for videos and novels
A) is steeper to the right.
B) is shallower to the right.
C) has a positive slope.
D) has a constant slope.

101) Generally, opportunity costs increase and the production possibilities frontier bows outward. Why?
A) Labor is scarcer than capital.
B) Unemployment is inevitable.
C) Technology is slow to change.
D) Resources are not equally useful in all activities.

102) When the production possibilities frontier is bowed outwards, the opportunity cost of producing more of one good
A) cannot be determined.
B) increases in terms of the amount foregone of the other good.
C) remains constant.
D) decreases in terms of the amount foregone of the other good.

103) Consider a PPF for tapes and soda. If the opportunity cost of a tape increases as the quantity of tapes produced increases and also the opportunity cost of a soda increases as the quantity of soda produced increases, then the PPF between the two goods will be
A) a straight, upward-sloping line.
B) bowed outward.
C) a straight, downward-sloping line.
D) All of the above are possible and more information is needed to determine which answer is correct.

104) Increasing opportunity cost occurs along a production possibilities frontier because
A) in order to produce more of one good decreasing amounts of another good must be sacrificed.
B) increasing wants need to be satisfied.
C) production takes time.
D) resources are not equally productive in all activities.

105) Increasing opportunity cost is due to
A) the fact that it is more difficult to use resources efficiently the more society produces.
B) the fact that resources are not equally suited for different types of production.
C) ever increasing taxes.
D) firms' needs to earn more and more profits.
106) Which of the following causes the production possibilities frontier to have a bowed out, curvilinear shape?
   A) the assumption that resources are not specialized
   B) the scarcity of resources
   C) the assumption that resources are specialized
   D) the point that moving along the PPF technology is held constant

107) The fact that opportunity costs increase while moving along a production possibilities frontier suggests that a production possibilities frontier for any economy will
   A) be bowed out, away from the origin.
   B) be a straight line with a constant and positive slope.
   C) reach a minimum and then rapidly increase.
   D) be bowed in, toward the origin

108) The principle of increasing opportunity cost occurs because
   A) scarcity exists.
   B) resources are being used inefficiently.
   C) we must give up something to get something else.
   D) resources are not equally suited to all activities.

109) One point on a PPF shows production levels at 50 tons of coffee and 100 tons of bananas. Remaining on the PPF, an increase of banana production to 140 tons shows coffee production at 30 tons. Still remaining on the PPF, we see that coffee production at 10 tons allows banana production at 160 tons. The opportunity cost of a ton of bananas is
   A) constant because coffee production decreased by the same amount each time.
   B) 16 to 1, that is every 1 ton of coffee given up will result in 16 more tons of bananas.
   C) decreasing, since the increase in banana production is less at each point considered.
   D) increasing from 1/2 ton of coffee to 1 ton of coffee per ton of bananas.
110) In the figure above, which of the curves shows a production possibilities frontier with increasing opportunity cost in the production of VCRs and telephones?

A) A  
B) B  
C) C  
D) All of the curves illustrate a production possibilities frontier with increasing opportunity cost in the production of VCRs and telephones.

111) Marginal cost is the opportunity cost

A) of a good or service divided by the number of units produced. 
B) that your activity imposes on someone else. 
C) of a good or service that exceeds its benefit. 
D) that arises from producing one more unit of a good or service.
112) In the figure above, the marginal cost of producing a computer
   A) falls as more computers are produced.
   B) rises as more computers are produced.
   C) is the same as the marginal cost of producing a television set.
   D) stays the same as more computers are produced.

113) In the figure above, the marginal cost of the second computer is
   A) 3 television sets.  
   B) 30 television sets.  
   C) 5 television sets.  
   D) 2 television sets.

114) In the figure above, the marginal cost of the fifth computer is
   A) 35 television sets.  
   B) 0 television sets.  
   C) 4 television sets.  
   D) 20 television sets.

115) Marginal cost curves generally slope
   A) upward because of decreasing opportunity cost.
   B) downward because of decreasing opportunity cost.
   C) upward because of increasing opportunity cost.
   D) downward because of increasing opportunity cost.

116) Marginal benefit is the benefit
   A) of producing a good or service when the total benefit from the good or service exceeds its total cost.
   B) that your activity provides to someone else.
   C) that is received from consuming one more unit of a good or service.
   D) of consuming another good or service divided by the total number of goods or services produced.
117) The marginal benefit from a good is the maximum amount a person is willing to pay for
   A) one more unit of the good divided by the number of units purchased.
   B) all of the units of the good the person consumes divided by the number of units he or she
      purchases.
   C) one more unit of the good.
   D) all of the good the person consumes.

118) The marginal benefit of a good or service is measured by
   A) the average social benefit received from consuming it.
   B) willingness to pay for an additional unit of it.
   C) the consumers' ability to pay for it.
   D) the cost of producing an additional unit of it.

119) The marginal benefit of a good or service usually
   A) decreases as we consume less of it. B) stays constant as we consume more of it.
   C) increases as we consume more of it. D) decreases as we consume more of it.

120) Marginal benefit curves generally slope
   A) downward because of increasing opportunity cost.
   B) upward because of increasing opportunity cost.
   C) upward, but not because of increasing opportunity cost.
   D) downward, but not because of increasing opportunity cost.

121) Marginal benefit curves slope
   A) upward, but marginal cost curves slope downward.
   B) downward, but marginal cost curves slope upward.
   C) upward and so do marginal cost curves.
   D) downward and so do marginal cost curves.

<table>
<thead>
<tr>
<th>Television sets (millions per year)</th>
<th>Willingness to pay (computers per television set)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>5</td>
<td>0.5</td>
</tr>
</tbody>
</table>

122) In the table above, the marginal benefit of the 4 millionth television set is
   A) negative 0.5 computers per television set.
   B) 0.25 computers per television set.
   C) 0.5 computers per television set.
   D) 1.0 computer per television set.

123) Resource use is efficient when
   A) we cannot produce more goods and services.
   B) we produce the goods with the lowest opportunity cost.
   C) we produce the goods we value most highly.
   D) we produce the goods with the highest opportunity cost.
124) When we cannot produce more of any good without giving up some other good that we value more highly, we have achieved
A) economic growth. B) allocative efficiency. C) equity. D) production.

125) If the marginal benefit of a good exceeds its marginal cost
A) we’ve achieved efficient resource use.
B) we should produce less.
C) we should produce more.
D) we cannot tell if more or less should be produced.

126) In the above figure, if 2 million computers are produced per year then the
A) marginal benefit of a computer exceeds the marginal cost of a computer, so more computers should be produced.
B) marginal cost of a computer exceeds the marginal benefit of a computer, so fewer computers should be produced.
C) marginal cost of a computer exceeds the marginal benefit of a computer, so more computers should be produced.
D) marginal benefit of a computer exceeds the marginal cost of a computer, so fewer computers should be produced.

127) In the figure above, if 4 million computers are produced per year then the
A) marginal benefit of a computer exceeds the marginal cost of a computer, so more computers should be produced.
B) marginal cost of a computer exceeds the marginal benefit of a computer, so more computers should be produced.
C) marginal cost of a computer exceeds the marginal benefit of a computer, so fewer computers should be produced.
D) marginal benefit of a computer exceeds the marginal cost of a computer, so fewer computers should be produced.
128) In the figure above, the efficient output of computers is
   A) the largest amount possible.  B) 2 million per year.
   C) 3 million per year.  D) 4 million per year.

129) In the figure above, at the efficient level of computer production consumers are willing to give up
   A) 3 televisions per computer.
   B) more than 3 televisions per computer.
   C) 0 televisions per computer.
   D) between 0 and 3 televisions per computer.

130) In the figure above, at the efficient level of computer production the marginal cost of producing a computer is
   A) between 0 and 3 televisions per computer.
   B) 0 televisions per computer.
   C) more than 3 televisions per computer.
   D) 3 televisions per computer.

131) An expansion of the production possibilities frontier is
   A) proof that scarcity is not a binding constraint.
   B) a free gift of nature.
   C) something that has occurred only rarely in history.
   D) called economic growth.

132) After Hurricane Mitch devastated part of Central America in October 1998, we can be reasonably sure that the production possibilities frontier for that area temporarily
   A) became steeper.
   B) became flatter.
   C) shifted outward, away from the origin.
   D) shifted inward, toward the origin.

133) Economic growth is the result of all of the following EXCEPT
   A) investment in human capital.
   B) technological change.
   C) opportunity cost.
   D) capital accumulation.

134) A key factor that leads to economic growth is
   A) avoiding the opportunity cost of investment.
   B) human capital accumulation.
   C) increasing current consumption.
   D) Both answers A and B are correct.

135) Technological progress makes the production possibilities frontier
   A) shift inward toward the origin.
   B) become more linear and less bowed.
   C) become less linear and more bowed.
   D) shift outward from the origin.

136) Consider a production possibilities frontier with corn on the vertical axis and cars on the horizontal. Unusually good weather for growing corn shifts
   A) neither the horizontal intercept nor the vertical intercept.
   B) the vertical intercept upward but does not shift the horizontal intercept.
   C) the horizontal intercept rightward but does not shift the vertical intercept.
   D) the horizontal intercept rightward and the vertical intercept upward.
137) Capital accumulation
   A) shifts the production possibilities frontier outward.
   B) has no impact on the production possibilities frontier.
   C) shifts the production possibilities frontier inward.
   D) makes the production possibilities frontier steeper.

138) The production possibilities frontier shifts as
   A) technology changes.
   B) tastes and preferences change.
   C) the unemployment rate changes.
   D) the money supply grows or shrinks.

139) The opportunity cost of economic growth is
   A) investment that a nation gives up to increase its economic growth.
   B) present consumption that a nation gives up to accumulate capital.
   C) future consumption that a nation gives up to consume more today.
   D) future consumption that a nation gets if it gives up some present consumption.

140) Economic growth
   A) allows us to increase our consumption in the present and in the future.
   B) leads to less consumption in the present but can increase consumption in the future.
   C) is free.
   D) is the major reason we face scarcity.

141) The production possibilities frontier in illustrated in the figure above will shift outward the most rapidly if point
   A) A is selected.  B) B is selected.  C) C is selected.  D) D is selected.

142) The figure above shows the production possibilities frontiers for four nations that have identical production possibilities frontiers in the present. The one that will grow most rapidly in the future is most likely to be at point
   A) A.  B) B.  C) C.  D) D.
143) Because of the existence of comparative advantage, the total output of goods is higher when each producer
   A) specializes in the production of a particular good.
   B) produces at the midpoint of its PPF.
   C) produces several different goods.
   D) makes both intermediate and final goods.

144) A person has a comparative advantage in producing a particular good if that person
   A) has higher productivity in producing it than anyone else has.
   B) has more human capital related to that good than anyone else has.
   C) can produce it at lower opportunity cost than anyone else can.
   D) has less desire to consume that good than anyone else has.

145) Possessing a comparative advantage in the production of a particular good
   A) permits gains from trade.
   B) encourages self-sufficiency.
   C) means that its opportunity cost is higher than that of other goods.
   D) tends to discourage specialization.

146) Individuals A and B both produce good X. We say that A has a comparative advantage in the production of good X if A
   A) has a lower opportunity cost of producing good X than has B.
   B) can produce more units of X in a given time period than can B.
   C) has a lower opportunity cost of producing good X than of producing good Y.
   D) can produce X using newer technology than can B.

147) In an eight-hour day, Andy can produce either 24 loaves of bread or 8 pounds of butter. In an eight-hour day, Bob can produce either 8 loaves of bread or 8 pounds of butter. We know that
   A) both bread and butter.
   B) butter, while Bob has a comparative advantage in the production of bread.
   C) bread and neither has a comparative advantage in the production of butter.
   D) bread, while Bob has a comparative advantage in the production of butter.

<table>
<thead>
<tr>
<th>Country A</th>
<th>Country B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good X (units of X)</td>
<td>Good Y (units of Y)</td>
</tr>
<tr>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
</tr>
</tbody>
</table>

148) In the table above, country A is producing 4 units of X and 8 units of Y and country B is producing 4 units of X and 6 units of Y. The opportunity cost of producing more of
   A) good Y is the same for both countries.
   B) good X is the same for both countries.
   C) good Y is lower in country A.
   D) good X is lower in country A.
149) In the table above, country A is producing 4 units of X and 8 units of Y and country B is producing 4 units of X and 6 units of Y. Regarding the production of good X
   A) country A has a comparative advantage.  B) country A has an absolute advantage.
   C) country B has an absolute advantage.  D) country B has a comparative advantage.

150) In the table above, country B is producing 4 units of X and 6 units of Y. For country B, the opportunity cost of producing an additional unit of X is
   A) 4 units of Y.  B) 2 units of Y.  C) 1 unit of Y  D) 3/2 units of Y.

151) In the table above, country B is producing 4 units of X and 6 units of Y. For country B, the opportunity cost of producing an additional unit of Y is
   A) 2/3 unit of X.  B) 1/2 unit of X.  C) 3 units of X.  D) 2 units of X.

152) Both Mergatroid and the Geebocks produce only gizmos and widgets. It is possible for Mergatroid to have
   A) neither a comparative nor an absolute advantage in both products.
   B) a comparative but not an absolute advantage in both products.
   C) an absolute but not a comparative advantage in both products.
   D) an absolute and a comparative advantage in both products.

153) One of the largest categories of exports from the United States is now pop culture: movies, music, TV programming, and videos. A direct conclusion from this information is that, compared to other countries, the United States has
   A) a comparative advantage in producing pop culture.
   B) lower wages for producers of pop culture.
   C) an absolute advantage in producing pop culture.
   D) higher wages for producers of pop culture.

154) One of the largest categories of exports from the United States is now pop culture: movies, music, TV programming, and videos. A direct conclusion from this information is that, compared to other countries, the United States has
   A) a lower opportunity cost of producing pop culture.
   B) lower wages for producers of pop culture.
   C) higher wages for producers of pop culture.
   D) a higher opportunity cost of producing pop culture.

155) George and Michael can gain from exchange
   A) if each specializes in the production of the good for which he has the higher opportunity cost.
   B) unless they have different opportunity costs.
   C) if each specializes in the production of the good for which he has the lower opportunity cost.
   D) unless one has an absolute advantage in all goods.

156) To obtain the gains available from comparative advantage, individuals or countries must do more than specialize; they must also
   A) trade.  B) invest.
   C) engage in research and development.  D) save.
157) By specialization and trade, two individuals can
   A) shift their individual production possibilities frontiers outward.
   B) consume at a point beyond their individual production possibilities frontiers.
   C) increase their absolute advantage.
   D) increase their comparative advantage.

158) Jane produces only corn and cloth. The land that she allocates to corn
   A) may have an absolute advantage for cloth, but nonetheless has a comparative advantage for corn.
   B) may have neither an absolute nor a comparative advantage for corn.
   C) must have both an absolute and a comparative advantage for corn.
   D) may have a comparative advantage for cloth, but nonetheless has an absolute advantage for corn.

159) In the figure above, suppose that Mac and Izzie trade and reach point c. Then
   A) Izzie produces outside her production possibilities frontier.
   B) Mac and Izzie both produce outside their production possibilities frontiers.
   C) Mac produces outside his production possibilities frontier.
   D) neither Mac nor Izzie produce outside their production possibilities frontiers.

160) In the figure above, suppose that Mac and Izzie trade and reach point c. Then
   A) Mac and Izzie should both produce at point c.
   B) Mac should produce at point b and Izzie should produce at point d.
   C) Mac should produce at point d and Izzie should produce at point b.
   D) Mac and Izzie should both produce at point a.

161) In the figure above, if Mac and Izzie both completely specialized and traded with one another, their joint output would be
   A) 3 computers and 3 TV sets per month.
   B) 12 computers and 12 TV sets per month.
   C) 24 computers and 24 TV sets per month.
   D) 6 computers and 6 TV sets per month.
162) In the figure above, suppose that Mac and Izzie specialize and trade to reach point $c$. Mac sends Izzie
A) 6 computers in exchange for 6 TVs.  
B) 12 computers in exchange for 12 TVs.  
C) 6 computers in exchange for 12 TVs.  
D) 12 computers in exchange for 6 TVs.

163) A person who has an absolute advantage in the production of all goods will
A) also have a comparative advantage in the production of all goods.  
B) have a comparative advantage only in the production of some goods but not for others.  
C) not be able to gain from specialization and exchange.  
D) have a production possibilities frontier with a constant slope.

164) Whenever a person can produce more of all goods than anyone else, that person
A) should be self-sufficient.  
B) has a comparative advantage in everything.  
C) has an absolute advantage.  
D) should specialize in everything.

165) A person who has an absolute advantage will
A) not specialize.  
B) have a comparative advantage in everything.  
C) not have a comparative advantage in everything.  
D) not trade.

166) If a person can produce more of all goods than anyone else, that person
A) has a comparative advantage in the production of all goods.  
B) has an absolute advantage.  
C) will be unable to gain from specialization and exchange.  
D) is no longer affected by scarcity.

167) Homer and Teddy are stranded on a desert island. To feed themselves each day they can either catch fish or pick fruit. In a day, Teddy could pick 60 pieces of fruit or catch 20 fish. Homer could pick 100 pieces of fruit or catch 150 fish. Which of the following is correct?
A) Homer has a comparative advantage in both catching fish and picking fruit.  
B) Homer has a comparative advantage in catching fish and Teddy has a comparative advantage in picking fruit.  
C) Teddy has a comparative advantage in both catching fish and picking fruit.  
D) Homer has a comparative advantage in picking fruit and Teddy has a comparative advantage in catching fish.

168) Homer and Teddy are stranded on a desert island. To feed themselves each day they can either catch fish or pick fruit. In a day, Teddy could pick 60 pieces of fruit or catch 20 fish. Homer could pick 100 pieces of fruit or catch 150 fish. Which of the following statements is correct?
A) Homer has an absolute advantage in picking fruit and Teddy has an absolute advantage in catching fish.  
B) Homer has an absolute advantage in both catching fish and picking fruit.  
C) Teddy has an absolute advantage in both catching fish and picking fruit.  
D) Homer has an absolute advantage in catching fish and Teddy has an absolute advantage in picking fruit.
169) Agnes can produce either 1 unit of X or 1 unit of Y in an hour, while Brenda can produce either 2 units of X or 4 units of Y in an hour. The opportunity cost of producing a unit of X is
A) 1 unit of Y for Agnes and 2 units of Y for Brenda.
B) 1 hour for Agnes and 1/2 hour for Brenda.
C) 1 hour for Agnes and 2 hours for Brenda.
D) 1 unit of Y for Agnes and 1/2 unit of Y for Brenda.

170) Agnes can produce either 1 unit of X or 1 unit of Y in an hour, while Brenda can produce either 2 units of X or 4 units of Y in an hour. The opportunity cost of producing a unit of Y is
A) 1 hour for Agnes and 1/2 hour for Brenda.
B) 1 hour for Agnes and 2 hours for Brenda.
C) 1 unit of X for Agnes and 1/2 unit of X for Brenda.
D) 1 unit of X for Agnes and 2 units of X for Brenda.

171) Agnes can produce either 1 unit of X or 1 unit of Y in an hour, while Brenda can produce either 2 units of X or 4 units of Y in an hour. There can be gains from exchange
A) only if Brenda becomes faster at producing X or Y.
B) if Agnes specializes in the production of Y and Brenda in X.
C) only if Agnes becomes faster at producing X.
D) if Agnes specializes in the production of X and Brenda in Y.

172) Agnes can produce either 1 unit of X or 1 unit of Y in an hour, while Brenda can produce either 2 units of X or 4 units of Y in an hour.
A) Brenda has a comparative advantage in the production of X.
B) Brenda cannot gain from trade.
C) Brenda has an absolute advantage over Agnes.
D) Agnes has a comparative advantage in the production of Y.

173) Dynamic comparative advantage arises from
A) decreasing marginal benefit.
B) learning–by–doing.
C) increasing opportunity cost.
D) absolute advantage.

174) Learning–by–doing is a basis for
A) reducing the gains from trade over time.
B) eliminating opportunity cost.
C) dynamic comparative advantage.
D) absolute comparative advantage.

175) The social arrangements that govern the ownership, use, and disposal of property are referred to as
A) private enterprise.
B) the double coincidence of wants.
C) capitalism.
D) property rights.

176) Intellectual property
A) is protected by common law rather than by written laws.
B) belongs to everyone with the necessary human capital to use it.
C) is protected by people’s sense of decency rather than by written laws.
D) is often protected by copyrights and patents.
177) In a world lacking property rights, it would be
   A) easier to realize the gains from trade and there would be more specialization.
   B) harder to realize the gains from trade and there would be more specialization.
   C) harder to realize the gains from trade and there would be less specialization.
   D) easier to realize the gains from trade and there would be less specialization.

178) A computer software program is most strongly an example of
   A) real property.
   B) fiat property.
   C) vicarious property.
   D) intellectual property.

179) The term "market" refers to
   A) trading arrangements that have been approved by the government.
   B) locations where buyers and sellers physically meet.
   C) any arrangement that enables buyers and sellers to get information and trade with one another.
   D) physical structures only.

180) In goods markets
   A) households sell to firms. In factor markets firms sell to households.
   B) and in factor markets households sell to firms.
   C) firms sell to households. In factor markets households sell to firms.
   D) and in factor markets firms sell to households.

181) Individual economic decisions are coordinated by
   A) government through adjustments in sales taxes.
   B) markets through adjustments in sales levels.
   C) government through adjustments in income taxes.
   D) markets through adjustments in prices.

182) If the United States can increase its production of automobiles without decreasing its production of any other good, the United States must have been producing at a point
   A) beyond its PPF.
   B) on its PPF.
   C) within its PPF.
   D) None of the above are correct because increasing the production of one good without decreasing the production of another good is impossible.

183) Production points inside the PPF are
   A) efficient but not attainable.
   B) inefficient and not attainable.
   C) efficient and attainable.
   D) inefficient and attainable.
184) In the above figure, at point a what is the opportunity cost of producing one more audio tape?  
A) 14 video tapes  
B) 1 video tape  
C) 2 video tapes  
D) There is no opportunity cost.

185) In the above figure, at point b what is the opportunity cost of producing 2 more audio tapes?  
A) 12 video tapes  
B) 2 video tapes  
C) 1 video tape  
D) There is no opportunity cost.

186) Production efficiency means that  
A) producing more of one good is possible only if the production of some other good is decreased.  
B) producing another unit of the good has no opportunity cost.  
C) scarcity is no longer a problem.  
D) as few resources as possible are being used in production.

187) The existence of the tradeoff along the PPF means that the PPF is  
A) negatively sloped.  
B) positively sloped  
C) linear.  
D) bowed outward.

188) The bowed–outward shape of a PPF  
A) is due to capital accumulation.  
B) is due to the existence of increasing opportunity cost.  
C) illustrates the fact that no opportunity cost is incurred for increasing the production of the good measured on the horizontal axis but it is incurred to increase production of the good measured along the vertical axis.  
D) reflects the unequal application of technology in production.
189) Moving along a bowed-out PPF between milk and cotton, as more milk is produced the 
marginal cost of an additional gallon of milk
   A) does not change.
   B) probably changes, but in an ambiguous direction.
   C) falls.
   D) rises.

190) The most anyone is willing to pay for another purse is $30. Currently the price of a purse is $40, 
and the cost of producing another purse is $50. The marginal benefit of a purse is 
   A) $40.
   B) $30.
   C) $50.
   D) an amount not given in the answers above.

191) If the marginal benefit from another computer exceeds the marginal cost of the computer, then 
to use resources efficiently,
   A) If the marginal benefit exceeds the marginal cost by as much as possible, the efficient 
      amount of resources are being used to produce computers.
   B) fewer resources should be used to produce computers.
   C) more resources should be used to produce computers.
   D) None of the above is correct because marginal benefit and marginal cost have nothing to 
      do with using resources efficiently.

192) Economic growth
   A) shifts the PPF outward.
   B) creates unemployment.
   C) has no opportunity cost.
   D) makes it more difficult for a nation to produce on its PPF.

193) The PPF shifts if 
   A) the unemployment rate falls.
   B) people decide they want more of one good and less of another.
   C) the resources available to the nation change.
   D) the prices of the goods and services produced rise.

194) An increase in the nation's capital stock will 
   A) cause a movement along the PPF downward and rightward.
   B) cause a movement along the PPF upward and leftward.
   C) shift the PPF outward.
   D) move the nation from producing within the PPF to producing at a point closer to the PPF.

195) One of the opportunity costs of economic growth is 
   A) the gain in future consumption.    B) reduced current consumption.
   C) capital accumulation.             D) technological change.

196) In general, the more resources that are devoted to technological research, the 
   A) more the PPF will bow outward.    B) higher is the unemployment rate.
   C) faster the PPF shifts outward.    D) greater is current consumption.
197) In order to achieve the maximum gains from trade, people should specialize according to
A) absolute advantage.  B) PPF.
C) comparative advantage.  D) property rights.

198) In one day, Brandon can either plow 10 acres or plant 20 acres. In one day, Christopher can
either plow 14 acres or plant 14 acres. Which of the following statements about comparative
advantage is correct?
A) Brandon has a comparative advantage only in planting.
B) Brandon has a comparative advantage in both plowing and planting.
C) Brandon has a comparative advantage only in plowing.
D) Christopher has a comparative advantage in both plowing and planting.

199) In one day, Brandon can either plow 10 acres or plant 20 acres. In one day, Christopher can
either plow 14 acres or plant 14 acres. Brandon and Christopher can
A) exchange, but only Brandon will gain from the exchange.
B) exchange, but only Christopher will gain from the exchange.
C) gain from exchange if Brandon specializes in planting and Christopher in plowing.
D) gain from exchange if Brandon specializes in plowing and Christopher in planting.

200) An increase in the nation’s capital stock will
A) shift the PPF outward.
B) cause a movement along the PPF down and to the right.
C) move the nation from producing within the PPF to producing at a point closer to the PPF.
D) cause a movement along the PPF up and to the left.

201) A nation can produce at a point outside its PPF
A) never.  B) when its PPF is bowed out.
C) when it produces inefficiently.  D) when it trades with other nations.

202) A nation can consume at a point outside its PPF
A) never.  B) when it trades with other nations.
C) when it produces inefficiently.  D) when its PPF is bowed out.

203) Which of the following does NOT help organize trade?
A) markets  B) the production possibilities frontier
C) property rights  D) None of the above because all these answers given help organize trade.

204) In markets, people’s decisions are coordinated by
A) specialization according to absolute advantage.
B) adjustments in prices.
C) learning-by-doing.
D) changes in property rights.
205) In the above figure, point A is ________, and point B is ________.
A) attainable, unattainable  
B) unattainable, attainable  
C) unattainable, unattainable  
D) attainable, attainable

206) Abe can catch 15 pounds of fish an hour or pick 30 pounds of fruit an hour. He works an 8-hour day, spending 5 hours picking fruit and 3 hours catching fish. Calculate Abe's opportunity cost of a pound of fruit.
A) 2 pounds of fish  
B) 3 hours a day  
C) 0.5 pounds of fish  
D) 6 minutes

207) In the figure above, if the quantity of yogurt produced increases from 2 gallons an hour to 3 gallons an hour, the opportunity cost of a gallon of yogurt in terms of ice cream is
A) 1 gallon.  
B) 4 gallons.  
C) half a gallon.  
D) 3 gallons.
208) Claire and Dag are farmers who produce beef and corn. In a year, Claire can produce 16 tons of beef or 40 bushels of corn, while Dag can produce 5 tons of beef or 25 bushels of corn. The opportunity cost of producing a ton of beef is
   A) 5 bushels of corn for Dag and 2.5 bushels of corn for Claire.
   B) 20 bushels of corn for Dag and 50 bushels of corn for Claire.
   C) 36.5 days for Dag and 45.6 days for Claire.
   D) 10 bushels of corn for Dag and 8 bushels of corn for Claire.

209) Abe can catch 10 pounds of fish an hour or pick 10 pounds of fruit. Zeb can catch 30 pounds of fish an hour or pick 20 pounds of fruit. The opportunity cost of fish is ________ for Abe than for Zeb, and the opportunity cost of fruit is ________ for Abe than for Zeb.
   A) lower, higher  B) lower, lower  C) higher, higher  D) higher, lower

210) Refer to the above figure. Mario is self-sufficient and so is Mia. Each produces 6 dishes of pasta and 4 pizzas. Mario and Mia decide to specialize and trade. After they have specialized and traded, compared to the initial situation, Mia’s opportunity cost of pasta has ________ and Mario’s opportunity cost of a pizza has ________.
   A) decreased, decreased  B) increased, increased
   C) increased, decreased  D) decreased, increased

211) The production possibilities frontier separates ________.
   A) the types of goods that can be attained from those that can’t be unattained
   B) the quantities of goods and services that can be produced from those that cannot be produced
   C) the combinations of goods that people value and those that they don’t
   D) the goods and services that people want from those that they do not want

212) When production is efficient, ________.
   A) we face a tradeoff and incur an opportunity cost
   B) we can satisfy our all wants
   C) our choice of the goods can be either on or within the production possibilities frontier
   D) the opportunity cost is as low as possible
213) As we move along a bowed-out production possibility frontier, producing more tacos and less pizza, the opportunity cost of a pizza ________.
   A) decreases  B) remains the same
   C) increases  D) increases and then decreases

214) Moving from one point on the production possibilities frontier to another ________.
   A) involves a tradeoff but does not incur an opportunity cost
   B) involves an opportunity cost but no tradeoff
   C) involves no tradeoff but it does incur an opportunity cost
   D) involves a tradeoff and incurs an opportunity cost

215) Microsoft’s marginal cost of the 100th copy of Windows 2002 is ________.
   A) the maximum amount that someone is willing to pay for the 100th copy of Windows 2002
   B) opportunity cost of producing 100 copies of Windows 2002
   C) opportunity cost of producing the 100th copy of Windows 2002
   D) maximum amount that she is willing to pay for 100 copies of Windows 2002

216) Beth reads two magazines this afternoon. The marginal benefit that Beth gets from the second magazine is the ________.
   A) opportunity cost of producing both magazines
   B) opportunity cost of producing the second magazine
   C) maximum amount that she is willing to pay for the second magazine
   D) maximum amount that she is willing to pay for the first magazine plus the maximum amount she is willing to pay for the second magazine

217) Economic growth comes from ________.
   A) producing more goods than people want to consume
   B) capital accumulation and the avoidance of opportunity cost
   C) people willing to increase their skills in which case, economic growth is free
   D) capital accumulation and technological advance

218) Tom and Di grow tomatoes and turnips. Tom has a comparative advantage in growing tomatoes if ________.
   A) his marginal benefit from tomatoes is greater than Di’s
   B) his opportunity cost of tomatoes is less than his opportunity cost of turnips
   C) his opportunity cost of tomatoes is less than Di’s opportunity cost of tomatoes
   D) Tom can grow more tomatoes than Di can

219) If Tom and Di specialize in producing the goods in which he and she have a comparative advantage and they exchange goods, then ________.
   A) they will lose because they are no longer able to produce and consume both goods.
   B) each will gain because each can consume a combination of goods that is outside her/his production possibility frontier
   C) one of them will gain and the other will lose
   D) each will produce a combination of goods that is within her/his production possibility frontier

220) Two social institutions that are essential for trade to be organized are ________.
   A) businesses and banks  B) property rights and laws
   C) markets and banks  D) markets and property rights
221) Harry produces 2 balloon rides and 4 boat rides an hour. Harry could produce more balloon rides but to do so he must produce fewer boat rides. Harry is ________ his production possibilities frontier.
   A) moving along
   B) producing outside
   C) producing on
   D) producing inside

222) Production efficiency occurs when production ________.
   A) is on the production possibilities frontier or inside it
   B) is on the production possibilities frontier
   C) is at any attainable point
   D) is at a point beyond the production possibilities frontier

223) The figure above shows Roger's production possibilities frontier. Point a is an ________ point and production is ________.
   A) attainable; inefficient
   B) attainable; efficient
   C) unattainable; inefficient
   D) unattainable; efficient
224) Vicky currently produces at point $a$ in the figure above. If Vicky moves from point $a$ to point $b$ to point $c$, her opportunity cost of a modem ________.  
A) is zero  
B) remains the same  
C) decreases  
D) increases

225) A country produces only pencils and erasers. Pencil production is efficient if the marginal ________ of a pencil equals the marginal ________ of ________.  
A) cost; cost; an eraser  
B) benefit; benefit; an eraser  
C) benefit; cost; a pencil  
D) cost; benefit; an eraser

226) When economic growth occurs, the  
A) production possibilities frontier shifts outward.  
B) the production possibilities frontier becomes steeper.  
C) production possibilities frontier shifts outward but no longer limits the amount that can be produced.  
D) economy moves along its production possibilities frontier.

227) In an hour, Andy can make either 5 pizzas or 12 pies and Chris can make either 6 pizzas or 18 pies. ________ advantage in making pizzas.  
A) Chris has a comparative  
B) Andy has a comparative  
C) Andy has an absolute  
D) None of the above answers is correct.
228) Anna and Maria produce shirts and ties. The figure above shows Anna's PPF and Maria's PPF. Anna and Maria can achieve the gains from trade if Anna produces ________ and Maria produces ________.
   A) ties; shirts  
   B) shirts; ties  
   C) shirts and ties; only ties  
   D) only ties; shirts and ties

229) Big Lobster sells lobster and fish, and so too does H Salt. If Big Lobster's opportunity cost of preparing lobster exceeds H Salt's opportunity cost, then all the following are true EXCEPT ________.
   A) They will both gain if Big Lobster sells fish and H Salt sells lobster  
   B) H Salt has a comparative advantage in lobster  
   C) Big Lobster has a comparative advantage in lobster  
   D) H Salt doesn't have a comparative advantage in cooking fish

230) Suppose that the United States and Cuba decide to open up trade. If each country specializes in the good in which it has a comparative advantage, ________ will gain from that trade because ________.
   A) both countries; consumption possibilities in both Cuba and the United States will lie outside their PPFs  
   B) only Cuba; consumption possibilities in Cuba will lie outside its PPF and U.S. consumption possibilities will not change  
   C) neither country; their consumption possibilities will not change  
   D) only the United States; consumption possibilities in Cuba will lie outside its PPF and U.S. consumption possibilities will not change
231) The figure above shows Freda's PPF. Freda currently produces 10 packets of fudge and no cookies. If Freda decides to produce 1 packet of cookies, her opportunity cost of the packet of cookies is ________ of fudge.
A) 2 packets  B) 1 packet  C) 1/2 packet  D) 0 packets

232) Joe's hot dog stand can produce hot dogs and hamburgers. The table gives Joe's production possibilities. The opportunity cost of ________.
A) the 40th hamburger is 20 hot dogs  B) 1 hamburger is 10 hot dogs
C) the 20th hot dog is 0 hamburgers  D) the first 20 hot dogs is 20 hamburgers
233) As Rainclouds Inc. moves downward along its production possibilities frontier, illustrated in the figure above, the opportunity cost of a raincoat ________.  
A) increases  
B) decreases  
C) depends on the initial quantity produced  
D) remains the same

234) Victor currently produces nuts and bolts at point a in the figure. Victor's marginal cost of producing an additional nut is ________.  
A) 8/6 bolts  
B) 1/2 bolt  
C) 1 bolt  
D) 8 bolts
<table>
<thead>
<tr>
<th>Quantity (pizzas per day)</th>
<th>Marginal benefit (cans per day)</th>
<th>Marginal cost (cans per day)</th>
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<tbody>
<tr>
<td>10</td>
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<td>14</td>
</tr>
<tr>
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<tr>
<td>70</td>
<td>14</td>
<td>26</td>
</tr>
</tbody>
</table>

235) The table above shows the marginal benefit from pizza and the marginal cost of pizza in cans of soda forgone. If ________ pizzas are produced, the quantity of soda that people are willing to give up to get an additional pizza is more than the quantity of soda that they must give up to get that additional pizza.
   A) 40   B) more than 40   C) fewer than 40   D) any quantity other than 40

236) An economy that uses new technology ________.
   A) has its PPF shift inward because more unemployment is created
   B) moves along its PPF and incurs an opportunity cost
   C) does not incur an opportunity cost because everyone can use new technology
   D) experiences economic growth but incurs an opportunity cost

237) In March 2002, a factory used new technology to produce its output. Then in August 2002, a fire destroys half the factory. The new technology shifted the factory's PPF ________ and the fire shifted it ________.
   A) inward; inward   B) outward; outward
   C) inward; outward   D) outward; inward

238) In one day, Sue can change the oil on 20 cars or the tires on 20 cars. In one day, Fred can change the oil on 20 cars or the tires on 10 cars. Sue's opportunity cost of changing oil is ________ than Fred's and her opportunity cost for changing tires is ________ than Fred's.
   A) greater; greater   B) greater; less   C) less; greater   D) less; less

239) In one day, Sue can change the oil on 20 cars or the tires on 20 cars. In one day, Fred can change the oil on 20 cars or the tires on 10 cars. Sue and Fred can gain from trade if Sue changes the ________ and Fred changes the ________.
   A) tires; tires   B) tires; oil   C) oil; oil   D) oil; tires

240) A country that has an absolute advantage in producing all goods will usually ________.
   A) have a comparative advantage in all goods
   B) have a comparative advantage in some goods but not all
   C) produce all goods at lowest opportunity cost
   D) not gain from specialization and trade
241) The opportunity cost of moving from point \( a \) to point \( b \) in the above figure is _______.
A) 2 sweaters  
B) zero  
C) 3 pairs of socks  
D) \( \frac{3}{2} \) pairs of socks per sweater

242) An economy produces at point \( a \) on the PPF shown in the above figure. A drought reduces the amount of wheat produced and the economy produces at point \( b \). The opportunity cost of a unit of wheat _______.
A) decreases  
B) increases  
C) is impossible to calculate without numbers on the axes  
D) remains the same
243) The opportunity cost of producing a unit of consumption at point b in the figure _______ point a.
   A) cannot be compared with  
   B) is greater than at  
   C) is the same as  
   D) is less than at

244) Leisure Land produces only sun screen and camel rides. The table shows the marginal benefit and marginal cost schedules for sun screen and camel rides. The efficient number of camel rides is _______.
   A) 2 rides per day  
   B) 1 ride per day because the marginal benefit exceeds the marginal cost by as much as possible  
   C) 4 rides per day  
   D) 6 rides per day because that is the maximum number of rides
245) Two countries, Alpha and Beta, have identical production possibilities frontiers. If Alpha produces at point $a$ and Beta produces at point $b$, then ________.
   A) Beta's future consumption will be greater than Alpha's
   B) Alpha's and Beta's economic growth rates will be the same
   C) Beta's economic growth rate will exceed Alpha's
   D) Alpha consumes less than Beta today, but it will grow faster than Beta

246) As a country that has a bowed-out production possibilities frontier produces more of the good in which it has a comparative advantage, the opportunity cost of a unit of that good ________.
   A) increases
   B) remains the same
   C) decreases
   D) might increase or decrease

<table>
<thead>
<tr>
<th>Blue Violet's production possibilities</th>
<th>Orange Rose's production possibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teapots (number per week)</td>
<td>Coffeepots (number per week)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>150 &amp; 0</td>
<td>75 &amp; 0</td>
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<tr>
<td>100 &amp; 25</td>
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<td>25 &amp; 100</td>
</tr>
<tr>
<td>0 &amp; 75</td>
<td>0 &amp; 150</td>
</tr>
</tbody>
</table>

247) Two countries, Blue Violet and Orange Rose, produce only two goods: teapots and coffeepots. The table above gives their production possibilities. ________ has a comparative advantage in teapots and ________ has a comparative advantage in coffeepots.
   A) Blue Violet; Orange Rose
   B) Orange Rose; Orange Rose
   C) Blue Violet; Blue Violet
   D) Orange Rose; Blue Violet
### Production Possibilities Table

<table>
<thead>
<tr>
<th>Blue Violet's Production Possibilities</th>
<th>Sweet Pansy's Production Possibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teapots (number per week)</td>
<td>Coffeepots (number per week)</td>
</tr>
<tr>
<td>150 &amp; 0</td>
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<td>100 &amp; 25</td>
<td>100 &amp; 50</td>
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<td>50 &amp; 100</td>
</tr>
<tr>
<td>0 &amp; 75</td>
<td>0 &amp; 150</td>
</tr>
</tbody>
</table>

248) Two countries, Blue Violet and Sweet Pansy, produce only two goods: teapots and coffeepots. The table above gives their production possibilities.

A) Blue Violet has a comparative advantage in teapots.
B) Both have a comparative advantage in teapots.
C) Sweet Pansy has an absolute advantage in teapots.
D) Sweet Pansy has a comparative advantage in teapots.

249) Two countries, Blue Violet and Sweet Pansy, produce only two goods: teapots and coffeepots. The table above gives their production possibilities. With specialization and trade, Sweet Pansy produces ________ and Blue Violet produces ________.

A) 150 coffeepots, 150 teapots
B) 150 teapots, 75 coffeepots
C) 100 teapots and 25 coffeepots, 100 teapots and 50 coffeepots
D) 150 teapots and 150 coffeepots, nothing

250) A country that has a comparative advantage in producing capital goods will ________ a country that has a comparative advantage in consumption goods.

A) reap all of the gains from trade with
B) reap fewer of the gains from trade with
C) specialize in producing capital goods and trade with
D) grow slower than
Answer Key
Testname: UNTITLED2

1) B
2) B
3) D
4) A
5) A
6) C
7) A
8) B
9) D
10) B
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42) C
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44) B
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46) D
47) D
48) A
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Testname: UNTITLED2

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99) B
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