## 1. Trade is:

A) a way for rich countries to take advantage of poorer countries.
B) good for rich countries and bad for poorer countries.
C) a drag on the economies of the trading countries.
D) a driver of economic growth.
2. Which of the following is NOT one of the three basic economic questions that each society must answer?
A) What goods and services are to be produced?
B) How are the goods and services to be produced?
C) Who decides what goods and services are in demand?
D) Who will receive the goods and services?
3. Which of the following is NOT considered a basic economic question?
A) How will the system accommodate change?
B) What goods and services will be produced?
C) Who will receive the goods and services?
D) How will these goods and services be produced?
4. To answer the question of how the goods and services are to be produced, society must decide:
A) what products businesses want to produce.
B) how to combine its scarce resources to produce the desired products.
C) what products government wants.
D) what products to export.
5. The "what" question primarily refers to:
A) the set of goods and services that are produced.
B) production efficiency.
C) whether the goods are produced under a communist system or a democratic system.
D) who gets what.
6. Which is NOT a basic economic question that societies must answer?
A) What goods and services are to be produced?
B) How are the goods and services to be produced?
C) Why are these goods and services being produced?
D) For whom are the goods and services being produced?
7. What are the three basic economic questions each society must answer?
A) what to produce; how to produce; for whom to produce
B) how much to produce; what quality to produce; and what price to sell at
C) what to produce; how to much to produce, how to consume
D) how much goes to government; how much goes to consumers; how much is exported
8. Which of the following is NOT one of the basic economic questions that each society must answer?
A) What goods and services are to be produced?
B) How are these goods and services to be produced?
C) How much do we pay those who produce the goods and services?
D) Who will receive these goods and services?
9. $\qquad$ refers to the way an economy allocates goods and services to consumers.
A) Production
B) Capital
C) Distribution
D) Absolute advantage
10. The way an economy allocates output to consumers is called:
A) distribution.
B) efficiency.
C) governmental allocation.
D) output maximization.
11. Planned economies rely heavily on $\qquad$ to make most economic decisions.
A) consumers
B) producers
C) the central government
D) corporations
12. A market economy is also known as a $\qquad$ economy, and decisions are made by
$\qquad$ -.
A) capitalist; the government
B) capitalist; private individuals
C) socialist; the government
D) socialist; private individuals
13. A laissez-faire approach to the question of "how to produce" would be found in a:
A) socialist economy.
B) communist economy.
C) market economy.
D) planned economy.
14. In a commustate, the $\qquad$ decide(s) what a society wants, but in a capitalist economy, the $\qquad$ decide what products they want.
A) government; producers
B) consumers; producers
C) government; consumers
D) producers; consumers
15. Which of the following is NOT part of a market economy?
A) Most economic decisions are made by central governments.
B) Product prices are the principal mechanism for communicating information in the system.
C) Consumers are free to decide what goods and services to purchase.
D) The government plays a primary role in protecting private property rights.
16. In a market economy, product prices do NOT help determine how:
A) consumers decide whether to buy or not buy.
B) firms employ their resources.
C) firms decide which production technology to use.
D) governments allocate their resources.
17. In a planned economy, most of the productive resources are owned by:
A) households.
B) business firms.
C) the government.
D) foreign countries.
18. In a pure market economy, the government's primary roles do NOT include:
A) protecting property rights.
B) enforcing contracts between private parties.
C) providing public goods such as national defense.
D) reallocating resources across the economy.
19. Which of the following is part of a planned economy?
A) Private individuals and firms own most resources.
B) Product prices are primarily determined by the interaction of demand and supply.
C) Most of the productive resources are owned by the state.
D) Consumers are free to decide what goods and services to purchase.
20. In a $\qquad$ economy, individuals and firms own most resources, and in a $\qquad$ economy, the government controls most resources.
A) market; planned
B) planned; socialist
C) planned; market
D) socialist; planned
21. The Scandinavian countries of Europe:
A) allow no role for the market.
B) allow a large role for government services.
C) have no barriers to the market.
D) do not protect property rights.
22. In a capitalist economy, the answer to the question "What should be produced?" is determined by:
A) the government.
B) consumers' demands for specific goods and services.
C) producers.
D) government and producers acting together.
23. The process of converting factors of production into goods and services is called:
A) distribution.
B) production.
C) factor conversion.
D) efficiency.
24. The conversion of resources to satisfy wants is described as:
A) consumption.
B) distribution.
C) production.
D) conservation.
25. Which of the following is NOT an economic factor of production?
A) land
B) entrepreneurial ability
C) money
D) labor
26. Capital, which includes all manufactured products that are used to produce other goods and services, earns:
A) profit.
B) wages.
C) interest.
D) rent.
27. In economics, the term "land" includes:
A) mostly agricultural land.
B) natural resources excluding water resources.
C) all natural resources.
D) resources found on Earth's surface.
28. Economists refer to "rent" as a payment to:
A) housing.
B) land.
C) capital.
D) labor.
29. The resource known as "labor" includes:
A) physical labor only.
B) physical and mental skills and talents.
C) people willing to do physical and difficult work.
D) the work of legal workers.
30. The concept of human capital is important to economists because:
A) improvements to human capital lead to higher standards of living.
B) it compares people with machinery.
C) it helps managers plan for future growth.
D) it shows ways for firms to reduce costs.
31. Human capital is:
A) the improvement to labor capabilities from training, education, and apprenticeship programs.
B) the equipment that companies use in the production process.
C) included in the land resource.
D) included in entrepreneurial ability.
32. Land as a productive resource does NOT include:
A) mineral deposits.
B) oil.
C) water.
D) computers.
33. The payment to land is called:
A) rent.
B) wages.
C) interest.
D) profit.
34. Economists refer to the payment to capital as:
A) rent.
B) wages.
C) interest.
D) profit.
35. Economists refer to the payment to land as:
A) rent.
B) wages.
C) interest.
D) profit.
36. The payment to entrepreneurship is called:
A) rent.
B) wages.
C) interest.
D) profit.
37. Entrepreneurs receive profits for their efforts primarily because they:
A) combine land, labor, and capital to produce goods and services.
B) combine land, labor, and capital to produce goods and services and assume the risks associated with business.
C) assume the risks associated with business.
D) have the best ideas.
38. In economics, capital refers to:
A) funds used by businesses to acquire goods and services.
B) the process of raising money in the stock market.
C) actual manufactured products used in the production process.
D) anything that adds to human capital.
39. If a pizza parlor uses an oven in its production process, the oven is an example of which factor of production?
A) capital
B) entrepreneurial ability
C) labor
D) land
40. Which is an example of capital in the production process of an amusement park?
A) the electricity used at the park
B) the mechanics who maintain the equipment
C) the roller coaster
D) the ticket-taker
41. Natural resources in the production process are called $\qquad$ , and their payment is called - .
A) capital; rent
B) labor; interest
C) land; rent
D) land; wages
42. What is considered a labor resource?
A) a sewing machine
B) an apprentice
C) mineral deposits
D) a copier
43. Which is considered a land resource?
A) a sewing machine
B) an apprentice
C) mineral deposits
D) a copier
44. Natural resources such as copper deposits are:
A) capital.
B) land.
C) labor.
D) investment capital.
45. Which of the following is NOT an example of an improvement to human capital?
A) students taking a course in economics
B) increasing the number of machines available to workers
C) an intensive apprenticeship program
D) an employee learning to use Microsoft Access
46. Land:
A) is not a scarce resource.
B) earns rent.
C) earns interest.
D) is only agricultural.
47. Capital:
A) refers to commercial bank lending policies.
B) is any manufactured product that is used to produce other products.
C) is a field of corn.
D) is the only element that is needed to turn resources into products.
48. Capital includes all of the following, EXCEPT:
A) dollar bills in a bank vault.
B) copy machines in an insurance company.
C) backhoes of a construction firm.
D) drilling equipment at a tool-and-die company.
49. Which of the following pairs do NOT match?
A) capital-interest
B) land-lease payment
C) labor-wages
D) entrepreneurial ability-profit
50. All of the following are considered human capital, EXCEPT:
A) working in a factory.
B) obtaining a college education.
C) receiving training for another area in a current job.
D) completing a professional development course.
51. Economists refer to the payment to labor as:
A) rent.
B) wages.
C) interest.
D) profit.
52. In economics, the term capital refers to:
A) money available to firms.
B) markets where companies go to raise funds.
C) the primary city in each governmental jurisdiction where most economic activity occurs.
D) manufactured products used to produce other goods and services.
53. In economics, the payment to capital is called:
A) factor payment.
B) interest.
C) capitalization.
D) profit.
54. Which statement regarding entrepreneurs is NOT correct?
A) Entrepreneurs combine the other resources to produce goods and services.
B) Entrepreneurs manage the day-to-day marketing, finance, and production decisions.
C) The payment entrepreneurs earn is called profit.
D) Entrepreneurs do not take on any business risks.
55. Entrepreneurs:
A) take no risk, if they are smart.
B) earn wages for their work.
C) combine and manage inputs of land, labor, and capital.
D) earn rents for their work.
56. $\qquad$ combine land, labor, and capital to produce goods and services and assume the risks associated with running businesses.
A) Economists
B) Capital marketers
C) Entrepreneurs
D) Financiers
57. When an economy is producing the mix of goods and service MOST desired by society, that economy is considered to be:
A) productively efficient.
B) productively equitable.
C) allocatively efficient.
D) allocatively equitable.
58. When the mix of goods and services produced is just what the society desires, then we have:
A) socialism.
B) communism.
C) production efficiency.
D) allocative efficiency.
59. $\qquad$ occurs when goods and services are produced at their lowest resource cost, while $\qquad$ occurs when the mix of goods and services produced is the most desired by society.
A) Allocative efficiency; production efficiency
B) Production efficiency; social efficiency
C) Allocative efficiency; social efficiency
D) Production efficiency; allocative efficiency
60. Which of the following is TRUE regarding production efficiency?
A) Efficiency and cost are unrelated concepts.
B) Production efficiency is independent of the type of technology used.
C) Producing at the lowest possible resource cost is equivalent to getting as much output as possible from a given set of resources.
D) The most economically efficient production technology is not always the cheapest.
61. "Production efficiency" is described as:
A) goods and services are being produced at their lowest resource cost.
B) the mix of goods and services produced is just what the society desires.
C) when one country has a lower opportunity cost of producing a good than another country.
D) when one country can produce more of a good than another country.
62. When a society is producing what society wants to consume, then it is said to have:
A) solved the economic problem.
B) an equitable distribution of goods and services.
C) an efficient form of government.
D) allocative efficiency.
63. $\qquad$ occurs when the mix of goods society decides to produce is produced at the lowest possible resource or opportunity cost.
A) Allocative efficiency
B) Production efficiency
C) Opportunity cost
D) Cost allocation
64. The production of too many Matchbox cars and not enough Barbie Dolls is an example of:
A) production inefficiency.
B) allocative inefficiency.
C) technical inefficiency
D) labor inefficiency.
65. When society produces the mix of goods and services that are most desired and produces them at the lowest cost possible:
A) production efficiency is achieved.
B) allocative efficiency is achieved.
C) production and allocative efficiency are achieved.
D) inefficiency occurs.
66. Which of the following restricts our choices so that we must make tradeoffs?
A) time and money
B) money and personal preferences
C) time and personal preferences
D) time, money, and personal preferences
67. The graphical tool we could use to represent the combinations of two goods that are possible with a given society at full employment is $a(n)$ :
A) efficiency curve.
B) allocation curve.
C) production possibilities frontier.
D) cost graph.
68. The $\qquad$ shows the combination of two goods that are possible for a society to produce at full employment.
A) full employment line
B) production possibilities frontier
C) goods and services frontier
D) maximal productivity curve
69. The derivation of a production possibilities frontier assumes:
A) some resources are not being used.
B) there is a fixed quantity of resources and technology available.
C) some resources are not being produced efficiently.
D) technology is free.
70. The production possibilities model holds $\qquad$ and $\qquad$ constant.
A) growth; human capital
B) land; labor
C) labor; capital
D) resources; technology
71. When an economy is operating efficiently, the production of one more unit of a good will result in the production of less of another good because:
A) technology can only improve the production of one good.
B) the PPF shifts inward as more of only one good is produced.
C) resources are limited and efficiency implies that all resources are already in use.
D) consumers will not want more of both goods.
72. A point on a nation's production possibilities frontier indicates:
A) an undesirable combination of goods and services.
B) combinations of output that are unattainable, given the current stock of resources and technology.
C) levels of production that will cause both unemployment and inflation.
D) that resources are fully utilized in producing a given combination of goods and services.
73. A point to the right of the production possibilities frontier is:
A) inefficient.
B) unattainable.
C) improbable.
D) efficient.
74. Production levels to the right of the PPF are:
A) attainable.
B) efficient.
C) inefficient.
D) unattainable.
75. Production levels to the left of the PPF are:
A) attainable but efficient.
B) attainable but inefficient.
C) unattainable and efficient.
D) unattainable and inefficient.
76. If an economy is operating at a point that is inside of its production possibilities frontier, then it can be assumed that its resources are:
A) misallocated.
B) overutilized.
C) fully utilized.
D) underutilized.
77. A country operating outside of the production possibilities frontier is:
A) operating efficiently.
B) operating inefficiently and at an uttainable level.
C) operating inefficiently but in an area that can be attained with proper use of resources.
D) impossible. A country cannot operate outside the production possibilities frontier.
78. A change from an inefficient mix to an efficient mix of output would BEST be represented with a production possibilities frontier (PPF) as a:
A) shift outward of the PPF.
B) shift inward of the PPF.
C) movement from inside the PPF onto the PPF.
D) movement from a point on the PPF to a point inside the PPF.
79. If an economy is producing at a point inside its PPF:
A) it is possible to produce more of one good without sacrificing some of the other good.
B) it is producing efficiently.
C) it is producing beyond its production possibilities.
D) full employment is achieved.
80. Points that are unattainable for an economy are shown as points:
A) inside the PPF.
B) on the PPF.
C) outside the PPF.
D) of unemployment.
81. Zetaland produces widgets and gadgets. At current levels of output, it can produce more of both. We can conclude that:
A) Zetaland is at full employment.
B) opportunity cost is maximized.
C) some resources are not being used.
D) the economy is on the PPF.

Use the following to answer question 82 :

## Figure: Production Possibilities


82. (Figure: Production Possibilities) Which of the following is NOT correct regarding combination X ?
A) The combination is productively efficient.
B) Society might judge other combinations on the line to be preferable to X .
C) Because it is on the line, combination X has no opportunity cost.
D) The combination might not be allocatively efficient.
83. Every point on the frontier of the production possibilities frontier represents:
A) production efficiency
B) allocative efficiency.
C) production and allocative efficiency.
D) X-efficiency.

Use the following to answer question 84:

## Figure: Tanks and Health Care


84. (Figure: Tanks and Health Care) Which of the following points in the figure is obtainable but NOT efficient?
A) point $a$
B) point $b$
C) $\operatorname{point} f$
D) point $g$

Use the following to answer question 85 :
Figure: Determining Production Possibilities

85. (Figure: Determining Production Possibilities) The graph shows the PPF for goods A and B and X marks a combination that:
A) has no opportunity costs.
B) cannot be obtained even with improvements in technology.
C) is unobtainable with current resources.
D) is obtainable if workers work harder.
86. Each point along a production possibilities frontier represents:
A) maximum output, given the state of technology and resource availability.
B) an economically inefficient combination of goods being produced.
C) a combination of goods that meets the equity criteria.
D) a combination of goods produced that can never be produced.
87. In the context of the production possibilities frontier, opportunity cost can be measured by the:
A) ratio of the amounts of the two goods being produced.
B) slope of the frontier.
C) ratio of the costs of the two goods being produced.
D) amount of labor needed to produce the goods and services.
88. A production possibilities frontier with constant opportunity cost is considered:
A) convex.
B) concave.
C) a straight line.
D) horizontal.
89. A production possibilities frontier with increasing opportunity cost is considered:
A) convex.
B) bowed.
C) a straight line.
D) horizontal.
90. A country operating inside of the production possibilities frontier is operating:
A) efficiently.
B) inefficiently and at an unattainable level.
C) inefficiently but in an area that can be attained.
D) in the unattainable region.
91. Full employment on a PPF is shown by:
A) points inside the PPF.
B) points along the frontier of the PPF.
C) points outside the PPF.
D) an inefficient use of resources.
92. The production possibilities frontier shows:
A) that unattainable combinations of goods occur inside the curve.
B) opportunity costs decreasing along the curve.
C) only two possible combinations of goods an economy can produce at full employment.
D) all possible combinations of two goods an economy can produce, given its available factors of production and technology.
93. A production possibilities frontier that is a straight line is the result of:
A) constant opportunity costs.
B) increasing opportunity costs.
C) scarcity.
D) underemployment of resources.
94. A lawyer can argue a case in court for one hour and make $\$ 300$. She could alternatively use that hour of time to type a legal brief in her office. What is the opportunity cost of her typing the legal brief?
A) nothing, since she would never type a legal brief
B) nothing, since she would always hire an administrative assistant to type for her
C) $\$ 300$, since that is the amount she could have made by arguing a case in court
D) There is not enough information in this problem to be able to answer the question.
95. Abdul decided to sleep in rather than attend his 8:30 A.M. economics class. Economists would find this choice:
A) rational, if Abdul has not missed any other classes.
B) irrational, because economic analysis suggests you should always attend the classes for which you have paid.
C) irrational, because oversleeping is not in Abdul's self-interest.
D) rational, if Abdul values sleep more highly than the benefit he would expect to receive from attending the class.
96. Which of the following is NOT an illustration of opportunity cost?
A) If I take a job as long-distance truck driver, I won't have as much time to spend with my family.
B) If I study for my English class, I won't have as much time to write creative poetry.
C) The more I work at my job, the more leisure time I have.
D) If I party every night of the week, my grades at school will suffer.
97. If you accept a job in Seattle as a financial analyst, you must give up the chance to accept a similar job in Australia. Giving up the job in Australia is your:
A) allocative cost.
B) opportunity cost.
C) production cost.
D) cost factor.
98. If the government of Spain decides to spend less on the military and more on health care, the forgone spending on military items represents the:
A) cost factor of the extra health care.
B) production efficiency of the extra health care.
C) opportunity cost of the extra health care.
D) allocative cost of the extra health care.
99. If the total cost of being a full-time college student for one year came to $\$ 17,000$, and that student could have earned $\$ 20,000$ working full time during that same year, then the opportunity cost of the year of college would be:
A) $\$ 3,000$.
B) $\$ 37,000$.
C) $\$ 20,000$.
D) $\$ 17,000$.

Use the following to answer question 100 :
Figure: Bran Muffins and Corn Flakes PPF

100. (Figure: Bran Muffins and Corn Flakes PPF) The graph shows the possibilities frontier for a bakery that makes corn flakes and bran muffins. Which of the following is NOT correct?
A) The opportunity cost of increasing production of corn flakes from 200 to 300 pounds is 50 pounds of bran muffins.
B) Due to limited resources, there is a tradeoff between producing corn flakes and bran muffins.
C) The graph implies that resources well-suited for making corn flakes are not as well-suited for producing bran muffins.
D) The company faces decreasing opportunity costs.

Use the following to answer question 101:

## Figure: Pork and Corn PPF


101. (Figure: Pork and Corn PPF) When we move from point $b$ to point $c$, the opportunity cost of producing more corn is $\qquad$ the opportunity cost of moving from point $d$ to point $e$.
A) greater than
B) exactly the same as
C) less than
D) It is indeterminate.
102. When you move from one point to another on the PPF and the opportunity cost of producing one good in terms of the other good does not change, then the PPF:
A) must be bowed out.
B) must be bowed in.
C) must be a straight line.
D) has an indeterminate shape.

Use the following to answer questions 103-104:

| Guns (hundreds) | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Butter (tons) | 0 | 5 | 10 | 15 | 20 | 25 | 30 |

103. (Table) The table shows the production possibilities schedule for guns and butter. As the production of butter increases, the opportunity cost of butter:
A) first rises, then falls.
B) first falls, then rises.
C) falls continuously.
D) remains constant.
104. (Table) The table shows the production possibilities schedule for guns and butter. The opportunity cost of increasing gun production from 100 to 200 is:
A) 0 tons of butter.
B) 5 tons of butter.
C) 10 tons of butter.
D) $\mathbf{1 5}$ tons of butter.

Use the following to answer questions 105-106:

|  | United States |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Coffee | 25 | 20 | 15 | 10 | 5 | 0 |
| Tea | 0 | 2 | 4 | 6 | 8 | 10 |
|  | Japan |  |  |  |  |  |
| Coffee | 58 | 38 | 25 | 15 | 7 | 0 |
| Tea | 0 | 3 | 10 | 20 | 35 | 60 |

105. (Table) The table shows coffee and tea units produced for the United States and Japan. If Japan decides to increase production of tea from 20 units to 35 units, the opportunity cost is:
A) 15 units of tea.
B) 10 units of tea.
C) 8 units of coffee.
D) 10 units of coffee.
106. (Table) The table shows coffee and tea units produced for the United States and Japan. The opportunity costs are:
A) increasing for United States and Japan.
B) constant for the United States and Japan
C) increasing for United States and constant for Japan
D) constant for the United States and increasing for Japan.
107. In an eight-hour day, Isabel can produce 15 pounds of taffy or 3 pounds of chocolate chip cookies. In an eight-hour day, Ramona can produce 6 pounds of taffy or 6 pounds of chocolate chip cookies. The opportunity cost of producing 1 pound of chocolate chip cookies is:
A) one-fifth of an hour for Isabel and one hour for Ramona.
B) one hour for Isabel and one hour for Ramona.
C) 5 pounds of taffy for Isabel and 1 pound of taffy for Ramona.
D) one-fifth of a pound of taffy for Isabel and 1 pound of taffy for Ramona.

Use the following to answer question 108:

|  | Bananas | Apples |
| :---: | :---: | :---: |
| E | 12 | 2 |
| F | 9 | 4 |
| G | 5 | 6 |
| H | 0 | 8 |

108. (Table) Given the production possibilities schedule shown in the table, what is the opportunity cost of moving from E to F ?
A) 2 bananas
B) 3 bananas
C) 2 apples
D) 4 apples

Use the following to answer questions 109-114:

## Figure: Bread and Honey


109. (Figure: Bread and Honey) As more honey is produced, the opportunity cost of producing honey:
A) decreases.
B) increases.
C) remains constant.
D) is constant for the first 50 jars and then decreases as productive efficiency is achieved.
110. (Figure: Bread and Honey) In the graph, point $b$ represents:
A) a point of inefficiency.
B) a point where all of society's resources are fully employed.
C) a better economic situation than point $a$.
D) economic growth.
111. (Figure: Bread and Honey) In the graph, a move from point $a$ to point $b$ costs:
A) 70 jars of honey.
B) 75 loaves of bread.
C) 90 loaves of bread.
D) 15 loaves of bread.
112. (Figure: Bread and Honey) Which point in the graph represents unemployed resources?
A) point $a$
B) point $b$
C) $\operatorname{point} f$
D) point $g$
113. (Figure: Bread and Honey) In the graph, a move from point $f$ to point $g$ :
A) is a move from full employment to less than full employment.
B) is impossible at present.
C) is a move from an inefficient point to one that fully utilizes all the available resources.
D) reflects a positive opportunity cost tradeoff.
114. (Figure: Bread and Honey) In the graph, a movement from point $f$ to point $g$ could occur if:
A) technological improvements occur.
B) unemployed workers find jobs.
C) people decide they prefer bread to honey.
D) people decide they prefer honey to bread.
115. A production possibilities frontier will have a curved or "bowed out" shape if:
A) opportunity costs are declining.
B) opportunity costs are increasing.
C) resources are scarce.
D) the economy is growing.
116. Increasing opportunity costs occur along the PPF because:
A) of unemployment in the economy.
B) not all resources are equally well suited to produce all goods.
C) resources lack specialization.
D) of inequities in the distribution of income.
117. Suppose that in Japan one worker can produce either four cars or five tons of grain per year. What is the opportunity cost of producing one car in Japan?
A) 0.4 tons of grain
B) 0.8 tons of grain
C) 1.25 tons of grain
D) 2.5 tons of grain
118. Which shaped curve reflects the reality that most goods are better suited for specific sorts of production?
A) straight line PPF
B) concave PPF
C) downward-sloping PPF
D) convex PPF
119. If an economy faces increasing opportunity costs with respect to the production of two goods, then the production possibilities frontier between the two goods will be:
A) bowed inward.
B) a straight downward-sloped curve.
C) bowed outward.
D) a positively sloped curve.
120. If a producer does NOT face increasing opportunity cost, then the production possibilities frontier is:
A) bowed inward.
B) a straight downward-sloped curve.
C) bowed outward.
D) a positively sloped curve.
121. Which of the following BEST illustrates increasing opportunity costs?
A) As new technology evolves, it becomes more difficult to obtain the energy to run the technology.
B) Immigration increases the productivity of the labor force even if it costs existing workers their jobs.
C) The costs of closing factories exceed the profit opportunities of keeping them operating.
D) As more rice is produced, farmers plant land that is excellent for growing other crops but poor for growing rice.

Use the following to answer questions 122-123:

| Books | 0 | 2 | 4 | 6 | 8 | 10 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Movies | 10 | 8 | 6 | 4 | 2 | 0 |

122. (Table) The table shows the number of hours Paul spends either reading books or watching movies. Paul only has 10 hours to use on the activities. If Paul decides to go from spending 2 hours reading books to four hours, what is his opportunity cost for watching movies?
A) 2 hours of movie watching
B) 4 hours of movie watching
C) 6 hours of movie watching
D) 8 hours of movie watching
123. (Table) According to the table, the shape of the production possibilities frontier is:
A) a straight line.
B) bowed.
C) vertical.
D) horizontal.

Use the following to answer questions 124-130:

| Production <br> iPads | HDSsibilities Schedule <br> HDTV |
| :---: | :---: |
| 5,000 | 0 |
| 4,500 | 1,000 |
| 3,500 | 2,000 |
| 2,000 | 3,000 |
| 0 | 4,000 |

124. (Table) If the table is graphed, the PPF shows:
A) constant opportunity costs.
B) increasing opportunity costs.
C) decreasing opportunity costs.
D) a constant slope.
125. (Table) In the table, a combination of 3,500 iPads and 1,500 HDTVs:
A) is unattainable.
B) wastes resources.
C) is accomplished at full employment.
D) lies outside of the PPF.
126. (Table) In the table, a combination of 4,500 iPads and 2,000 HDTVs:
A) is unattainable.
B) shows as a point on the PPF
C) shows as a point inside of the PPF
D) is accomplished at full employment.
127. (Table) In the table, a combination of 3,500 iPads and 2,000 HDTVs is:
A) unattainable.
B) a point inside of the PPF.
C) a point outside of the PPF.
D) a point on the PPF.
128. (Table) In the table, if society wants to increase production of HDTVs from 1,000 to 2,000 the opportunity cost of doing so will be:
A) 500 iPads .
B) 4,500 iPads.
C) 3,500 iPads.
D) 1,000 iPads.
129. (Table) In the table, if society wants to increase production of HDTVs from 2,000 to 3,000 the opportunity cost of doing so will be:
A) 500 iPads.
B) 1,500 iPads.
C) 1,000 iPads.
D) 2,000 iPads.
130. (Table) In the table, if society wants to increase production of iPads from 4,500 to 5,000, production of HDTVs will:
A) fall to 1,000 .
B) increase.
C) fall to 0 .
D) stay the same.

Use the following to answer question 131:

## Bread Cookies

(loaves) (dozens)
$0 \quad 100$
$25 \quad 90$
$50 \quad 75$
$75 \quad 45$
100

131. (Table) Suppose an economy can produce the combinations of bread and cookies shown in the following table. The opportunity cost of increasing bread production from 25 to 50 loaves is $\qquad$ and the opportunity cost of increasing bread production from 50 to
75 loaves is $\qquad$
A) 25 loaves of bread; 30 dozen cookies
B) 15 dozen cookies; 30 dozen cookies
C) 90 dozen cookies; 45 dozen cookies
D) 75 loaves of bread; 50 loaves of bread
132. When resources are being used inefficiently, the:
A) economy is operating at a point outside its PPF.
B) PPF shifts outward.
C) economy is operating at a point inside its PPF.
D) economy is operating at a point on the PPF.
133. Points inside (below and to the left of) the PPF are:
A) attainable and efficient.
B) unattainable and efficient.
C) attainable and inefficient.
D) unattainable and inefficient.
134. When a country is operating at its full potential output, it is producing at a point:
A) above and to the right of the PPF.
B) on the PPF.
C) below and to the left of the PPF.
D) There is not enough information to answer this question.

Use the following to answer question 135:
Figure: Pork and Corn PPF

135. (Figure: Pork and Corn PPF) Using the graph, if we are operating at the economy's potential output, then production can be at points:
A) $b$ or $h$.
B) $c$ or $f$.
C) $h$ or $g$.
D) $g$ or $d$.

Use the following to answer questions 136-137:

## Figure: Pork and Corn PPF 2


136. (Figure: Pork and Corn PPF 2) If we want to produce 10 units of corn, then we can produce no more than $\qquad$ unit(s) of pork.
A) 1
B) 2
C) 3
D) 4
137. (Figure: Pork and Corn PPF 2) The opportunity cost of producing a unit of pork is ___unit(s) of corn.
A) 1
B) 5
C) 8
D) 10
138. A country's GDP is inside the frontier of the production possibility frontier. This could happen because of:
A) technological change.
B) a recession.
C) economic growth.
D) a lack of land resources.
139. An increase in the quantity and/or quality of labor available could be due to each of the following, EXCEPT:
A) an increase in the working age population.
B) more women entering the workforce.
C) strict immigration policy enforcement.
D) an increase in the college graduation rate.
140. Which is NOT a source of economic growth?
A) increasing business investment
B) increasing research and development
C) reducing the level of international trade
D) reducing the variability of inflation
141. Which are the principal resources that can be changed through government action?
A) capital and entrepreneurial ability
B) capital and labor
C) labor and entrepreneurial ability
D) labor and land
142. If a society's production possibilities frontier shifts to the right:
A) the society's standard of living may increase.
B) the society must choose a different mix of goods.
C) there must be an increase in one industry's production and a decrease in that of others.
D) there must have been an increase in the society's resources.

Use the following to answer question 143:

## Figure: Interpreting PPF Shifts


143. (Figure: Interpreting PPF Shifts) According to the graph, which of the following changes may cause the production possibilities frontier to shift inward from $\mathrm{PPF}_{1}$ to $\mathrm{PPF}_{0}$ ?
A) increasing the labor force
B) improving the skills of the workers
C) increasing government regulation on businesses overall
D) increasing the population

Use the following to answer question 144:

## Figure: Interpreting PPF Shifts 2


144. (Figure: Interpreting PPF Shifts 2) The graph describes a situation in which:
A) both industries have experienced technological improvements.
B) only Industry 1 has had a technological improvement.
C) neither industry has had technological improvements.
D) only Industry 2 has had a technological improvement.

Use the following to answer question 145 :

## Figure: Interpreting PPF Shifts 3


145. (Figure: Interpreting PPF Shifts 3) Which of the following would NOT be a possible explanation for the shift depicted in the graph?
A) Workers receive more education.
B) New technology is developed.
C) Unemployment rises.
D) New energy resources are found.
146. Which of the following can lead to a decrease (leftward shift) in the PPF?
A) banning a technology due to its adverse environmental effects
B) a policy encouraging more immigration
C) tax breaks on the adoption of more efficient technologies
D) a policy that encourages entrepreneurship
147. A country can use its given resources to produce capital goods or consumer goods. This implies that:
A) an economy can "have it all."
B) there is a conflict between capitalists and consumers.
C) more consumption in the present leads to higher economic growth for future generations.
D) there is a tradeoff between the current and the future standard of living.
148. Suppose that the government could stimulate spending in one of the following expenditure categories. In which of these categories would the spending increase contribute most to an expansion of production possibilities?
A) consumption goods
B) government purchases
C) net exports
D) capital goods
149. Which of the following would be MOST likely to cause the production possibilities frontier to shift to the left?
A) an increase in population
B) a technological advance
C) a decrease in the size of the labor force
D) a decrease in taxes

Use the following to answer question 150 :
Figure: Determining Production Possibilities 2

150. (Figure: Determining Production Possibilities 2) Which point in the graph is consistent with a recession?
A) point $a$
B) point $b$
C) point $c$
D) point $d$
151. Which of the following MOST likely to cause the production possibilities frontier to shift to the right?
A) an increase in technology
B) an increase in consumption
C) an increase in producer prices
D) an increase in tax revenues
152. Economic growth is shown as a:
A) shift to the left in the PPF.
B) shift to the right in the PPF.
C) movement up along the PPF.
D) movement down along the PPF.

Use the following to answer question 153 :
Figure: Determining Production Possibilities 3

153. (Figure: Determining Production Possibilities 3) According to the graph, output combination represented by the diamond can be achieved only:
A) by reducing immigration.
B) if the unemployment rate were zero.
C) if more resources were acquired.
D) by importing less.
154. The increased participation of women in the work force:
A) has led to a shift in the structure of the work force toward services.
B) has not contributed to the rate of economic growth, because the women have simply shifted from waged work to unwaged work.
C) has contributed to the rate of economic growth.
D) shifts the PPF curve to the left.
155. Economic growth is shown as a:
A) shift to the left of the PPF.
B) movement inside the PPF.
C) movement along the PPF.
D) shift to the right of the PPF.
156. Which of the following results in a higher standard of living?
A) higher tax rates
B) higher inflation rates
C) higher levels of education
D) a decrease in trade exposure
157. The two basic determinants of economic growth are $\qquad$ and $\qquad$ .
A) expanding resources; improving technologies
B) tariffs; trading with weaker countries
C) income taxes; human capital
D) government spending; labor productivity
158. If a nation selects a product mix focused on $\qquad$ goods, the production possibilities frontier will expand at a greater rate than if the nation produced mostly
$\qquad$ goods.
A) labor-intensive; capital intensive
B) consumption; capital
C) labor-intensive; consumption
D) capital; consumption
159. Investment in human capital refers to:
A) education, on-the-job training, and professional training activities.
B) increasing the machinery and equipment firms use.
C) increasing the number of people working at companies.
D) increasing the financial capital in the economy.
160. The following action will NOT shift a PPF curve outward:
A) increasing the number of workers.
B) increasing worker productivity.
C) shifting preferences of consumers to cheaper products.
D) technological change.
161. An increase in technology:
A) shifts the PPF curve outward.
B) shifts the PPF curve inward.
C) creates unemployment.
D) decreases inflation.
162. Which of the following does NOT represent an increase in the level of human resources available to an economy?
A) decrease in the unemployment rate
B) immigration
C) more people entering the labor force
D) higher birth rate
163. Which of the following shifts the PPF outward?
A) decreasing population
B) capital accumulation
C) increasing prices
D) increasing consumption
164. The introduction of the tablet computer to the U.S. economy would BEST be represented with a production possibilities frontier (PPF) as a:
A) shift outward of the PPF.
B) shift inward of the PPF.
C) movement from inside the PPF onto the PPF.
D) movement from a point on the PPF to a point inside the PPF.
165. Increased illegal immigration into the United States would best be represented with a production possibilities frontier (PPF) as a:
A) shift outward of the PPF.
B) shift inward of the PPF.
C) movement from inside the PPF onto the PPF.
D) movement from a point on the PPF to a point inside the PPF.

Use the following to answer question 166 :

## Figure: Interpreting PPF Shifts 4


166. (Figure: Interpreting PFF Shifts 4) The graph depicts the effects of an improvement in technology. One can conclude from the graph that the technology:
A) provided minimal benefit to this society.
B) affected the production of $X$ more than the production of $Y$.
C) reduced unemployment.
D) affected the production of $Y$ more than the production of $X$.
167. Technological improvements in the U.S. economy have:
A) reduced the costs of production for U.S. companies.
B) increased production levels in the United States.
C) shifted the U.S. PPF to the right.
D) They have resulted in all of these.
168. Which of the following is NOT a factor of economic growth?
A) a drop in the savings rate
B) an increase in the size of the labor force
C) an investment in human capital
D) an increase in the capital stock
169. A study by the Organisation for Economic Co-operation and Development (OECD) on factors driving economic growth finds per capita GDP is:
A) unaffected by increases in average education levels.
B) positively affected by increased tax burdens.
C) negatively affected by higher levels of research and development.
D) positively affected by lower inflation rates.
170. One of the drivers of economic growth is:
A) specialization.
B) consumption.
C) international trade.
D) All of these drive economic growth.
171. In order for a country to experience economic growth, the country must:
A) reduce output.
B) increase inputs.
C) be productively efficient.
D) be more allocatively efficient.
172. According to the OECD, which of the following will lead to increase in the per capita GDP?
A) increased trade barriers
B) higher taxes
C) higher prices across the board
D) increased business investment
173. Which of the following encourages economic growth?
A) taxes on imports
B) inflation
C) education
D) taxes on income
174. According to the Organisation for Economic Co-operation and Development (OECD), economic growth is driven by:
A) increased trade exposure.
B) higher levels of inflation.
C) less spending on graduate schools.
D) less business investment.
175. According to a recent study by the Organisation for Economic Co-operation and Development (OECD), which of the following results in a higher standard of living (per capita GDP)?
A) higher inflation rate
B) greater tax burden
C) lower inflation rate
D) smaller level of international trade
176. According to the Organisation for Economic Co-operation and Development (OECD), an increase in which of the following would lead to a lower rate of per capita growth?
A) business investment
B) research and development
C) greater tax burden
D) trade exposure
177. The government can make owning a business easier or more profitable by doing all of the following, EXCEPT:
A) reducing regulations.
B) offering low-interest loans.
C) offering favorable tax treatment.
D) asking individual investors to take additional risks.
178. The concepts of absolute and comparative advantage were developed by:
A) Friedrich von Hayek.
B) David Ricardo.
C) Gunnar Myrdal.
D) Paul Samuelson.
179. Which economist is known for first describing "comparative advantage"?
A) Thomas Malthus
B) John Stuart Mill
C) David Ricardo
D) Adam Smith
180. The theory which suggested that countries would mutually benefit from trade by specializing in export goods they could produce at a lower opportunity cost than another country is called:
A) marginal utility.
B) labor specialization theory.
C) absolute advantage.
D) comparative advantage.
181. Who developed the theory of comparative advantage?
A) John Stuart Mill
B) Adam Smith
C) David Ricardo
D) Karl Marx
182. David Ricardo would be MOST likely to agree with which one of the following statements?
A) High tariffs on grain are needed to protect the living standards of farmers.
B) Free trade benefits both trading countries.
C) If you have an absolute advantage in both trousers and beer, you should not trade with other countries.
D) If you have a comparative advantage in both trousers and beer, you should not trade with other countries.
183. David Ricardo:
A) suggested that increasing wages for workers would increase their consumption and lead to economic growth.
B) wanted to protect textile markets in England.
C) suggested that countries would benefit from trade.
D) suggested that goods were exchanged based of the value of those in use.
184. Free trade is known as a $\qquad$ game because $\qquad$ .
A) positive-sum; one trader's gain is another's loss
B) positive-sum; both parties to a transaction can score positive gains
C) zero-sum; one trader's gain is another's loss
D) zero-sum; both parties to a transaction can score positive gains
185. Voluntary trade between nations
A) has an outcome like poker games.
B) is a positive-sum game.
C) is a zero-sum game.
D) is a negative-sum game.
186. "The economic wealth of this country was built primarily by some individuals profiting from a transaction, whereas others were harmed by that transaction." This statement indicates the author:
A) fails to understand the fallacy of composition.
B) fails to understand that all voluntary trades benefit both parties involved.
C) fails to understand the significance of the PPF.
D) uses sound economic thinking. The statement is essentially correct.
187. $\qquad$ advantage exists when one country can produce more of a good than another country.
A) Comparative
B) Absolute
C) Unfair
D) Home country
188. If one country has a(n) $\qquad$ advantage in the production of one item, it can always produce more of the item than another nation.
A) comparative
B) absolute
C) special
D) trade
189. Absolute advantage is defined as:
A) goods and services are produced at their lowest resource (opportunity) cost.
B) the mix of goods and services produced is just what the society desires.
C) one country has a lower opportunity cost of producing a good than another country.
D) one country can produce more of a good than another country.
190. Most trade is based on specialization according to:
A) brand recognition advantage.
B) location advantage.
C) comparative advantage.
D) absolute advantage.
191. The theory of comparative advantage says that countries:
A) should restrict trade by cutting off all imports.
B) should import those goods they can produce at a lower opportunity cost than another country.
C) can never benefit from specialization in trade.
D) should export those goods they can produce at a lower opportunity cost than another country.
192. The key to computing comparative advantage is:
A) calculating the value of the absolute advantage.
B) measurement of opportunity cost.
C) calculating the cost of production.
D) computing consumer choice.
193. If a producer has a comparative advantage, then she has selected the activity that:
A) has the lowest resource cost.
B) is outside of the production possibilities frontier.
C) has the lowest opportunity cost.
D) does not require specialization.
194. Jason produces more jeans than Jasmine. Why would Jason and Jasmine want Jasmine to produce the jeans although they both know that he can produce more than she can at a faster rate?
A) Jasmine has a lower opportunity cost of producing the jean than Jason.
B) Jason has a lower opportunity cost of producing the jeans than Jasmine.
C) Jason has an absolute advantage in producing the jeans.
D) Jasmine has the absolute advantage of producing the jeans.
195. Paolo can walk three dogs or mow two lawns in two hours. Ashanti can walk six dogs or mow three lawns in two hours. One can conclude that:
A) Ashanti has absolute advantage in lawn-mowing, and Paolo has comparative advantage in dog-walking.
B) Ashanti has absolute advantage in dog-walking, and Paolo has comparative advantage in lawn-mowing.
C) Paolo has absolute advantage in lawn-mowing, and Ashanti has comparative advantage in dog-walking.
D) Paolo has absolute advantage in dog-walking, and Ashanti has comparative advantage in lawn-mowing.
196. Paolo can walk three dogs or mow two lawns in two hours. Ashanti can walk six dogs or mow three lawns in two hours. Ashanti's opportunity cost for each additional dog walked is:
A) 0.5 lawns mowed.
B) 1.5 lawns mowed.
C) 2.0 lawns mowed.
D) 2.5 lawns mowed.
197. Paolo can walk three dogs or mow two lawns in two hours. Ashanti can walk six dogs or mow three lawns in two hours. According to trade theory, $\qquad$ should walk dogs because $\qquad$ _.
A) Ashanti; she produces more than Paolo in a two-hour period
B) Ashanti; she enjoys comparative advantage in dog-walking
C) Paolo; he faces a lower opportunity cost for walking dogs
D) Paolo; he enjoys absolute advantage in dog-walking
198. The law of comparative advantage suggests that:
A) each country should strive to produce roughly equal amounts of all goods.
B) nations can benefit if they trade with each other.
C) free trade among nations is generally harmful to an economy.
D) each country should strive to be self-sufficient.
199. Comparative advantage arises because:
A) all resources are equally effective in the production of goods.
B) the division of labor increases efficiency.
C) the division of labor helps market function effectively.
D) not all resources are equally effective in the production of goods.
200. Suppose the country of Alphaland can produce more cars than Omegaland can produce. An economist would conclude that Alphaland has a(n) $\qquad$ in producing cars.
A) absolute advantage
B) comparative advantage
C) higher opportunity cost
D) higher resource cost
201. Suppose that if the United States produced only oil, it could produce 25 million barrels, and if it produced only microchips it could produce 20 million chips. Suppose that if Mexico produced only oil, it could produce 16 million barrels, and if it produced only microchips, it could produce 8 million chips. Which of the following statements is then correct?
A) Mexico has a comparative advantage in producing both goods.
B) The United States has an absolute advantage over Mexico in producing both goods.
C) Mexico has an absolute advantage over the United States in producing both goods.
D) The United States has a comparative advantage in producing both goods.
202. Which of the following situations would MOST likely lead to an import of copper?
A) a tariff placed on copper
B) an absolute disadvantage in the production of copper compared to other nations
C) an absolute advantage in the production of copper by other nations
D) a comparative advantage in the production of copper by other nations
203. Comparative advantage exists when one country can produce:
A) more of a good than can another country.
B) less of a good than can another country.
C) a good at a higher opportunity cost than can another country.
D) a good at a lower opportunity cost than can another country.
204. To gain from trade, a country should:
A) always try to get a favorable tariff.
B) specialize in the commodity in which it has a comparative advantage.
C) always specialize in the commodity in which it has an absolute advantage.
D) trade only with its political allies.
205. If a country has few resources:
A) trade will never occur.
B) trade will not increase the GDP.
C) it will still have a comparative advantage in something.
D) specialization would be useless.
206. International trade:
A) increases consumer prices.
B) increases consumption possibilities.
C) reduces production possibilities.
D) reduces resource consumption.

Use the following to answer questions 207-209:

|  | Sweaters | Skirts |
| :---: | :---: | :---: |
| Germany | 6 | 12 |
| Greece | 4 | 20 |

207. (Table) If Germany decided to produce skirts, what is Germany's opportunity cost?
A) 2 sweaters
B) $1 / 2$ of sweater
C) 1 sweater
D) $1 / 4$ of a sweater
208. (Table) Germany has a comparative advantage in producing:
A) sweaters and skirts.
B) sweaters only.
C) skirts only.
D) neither good.
209. (Table) Greece has a comparative advantage in:
A) sweaters and skirts.
B) sweaters only.
C) skirts only.
D) neither good.
210. Two countries will benefit from trade if:
A) each country has a higher opportunity cost of producing the traded good.
B) each country has a lower opportunity cost of producing the traded good.
C) each country has an absolute advantage of producing the good.
D) one country does not produce the traded good.
211. The United States can grow wheat more efficiently than Japan. The United States has a(n) $\qquad$ in wheat production.
A) higher opportunity cost
B) comparative advantage
C) absolute disadvantage
D) absolute advantage

Use the following to answer questions 212-214:
Figure: Ships and Autos in Countries A and B

212. (Figure: Ships and Autos in Countries A and B) Two countries manufacture automobiles and ships. Based on the graphs, which statement is correct?
A) The opportunity cost in Country A of producing 1 ship is 2 cars.
B) The opportunity cost in Country B of producing 1 ship is 10 cars.
C) Country $B$ is more efficient at ship building.
D) Both countries are equally efficient at ship building because the PPFs are linear.
213. (Figure: Ships and Autos in Countries A and B) Two countries manufacture automobiles and ships. Based on the graphs, which statement is correct?
A) Country A has a comparative disadvantage in producing ships.
B) The two countries should not trade with each other because they can produce both goods.
C) Country B has an absolute advantage in both goods because the line is closer to the origin.
D) Country A has an absolute advantage in producing ships.
214. (Figure: Ships and Autos in Countries A and B) Two countries manufacture automobiles and ships. Based on the graphs:
A) Country A should specialize in auto manufacturing and B, in ship building.
B) there are no advantages to trade because Country A can produce more of both goods.
C) there are no advantages to trade because the lines are downward sloping.
D) Country A should specialize in ship building and Country B, in auto manufacturing.

Use the following to answer questions 215-216:
Figure: Corn and Oil in the United States and the United Kingdom

United States

| Corn | Oil |
| :---: | ---: |
| 50 | 0 |
| 0 | 50 |
| 25 | 25 |

PPF——United States


United Kingdom
Corn Oil
0
2
1
PPF——United Kingdom

215. (Figure: Corn and Oil in the United States and the United Kingdom) Refer to the graphs for the United States and the United Kingdom. If the starting point is point $a$, what is the opportunity cost of the United Kingdom producing one more barrel of oil?
A) . 5 bushel of corn
B) 1 bushel of corn
C) 1.5 bushels of corn
D) 2 bushels of corn
216. (Figure: Corn and Oil in the United States and the United Kingdom) Refer to the graphs for the United States and the United Kingdom. If the starting point is point $a$, what is the opportunity cost of the United States producing 15 more barrels of oil?
A) 5 bushels of corn
B) 10 bushels of corn
C) 15 bushels of corn
D) 20 bushels of corn

Use the following to answer questions 217-222:

| Canada's production possibilities |  |
| :---: | :---: |
| Tons of Steel | Airplanes |
| 15 | 0 |
| 10 | 4 |
| 5 | 8 |
| 0 | 12 |

Mexico's production possibilities Tons of Steel Airplanes
$6 \quad 0$
$4 \quad 2$
$2 \quad 4$
$0 \quad 6$
217. (Table) Based on the table:
A) Canada face increasing opportunity costs.
B) Mexico face increasing opportunity costs.
C) both Canada and Mexico face constant opportunity costs.
D) both Canada and Mexico face increasing opportunity costs.
218. (Table) Based on the table:
A) Mexico has an absolute advantage over Canada in producing both steel and airplanes.
B) Canada has an absolute advantage over Mexico in producing both steel and airplanes.
C) Mexico has a comparative advantage in producing steel.
D) Canada has a comparative advantage in producing airplanes.
219. (Table) Based on the table:
A) Canada has a comparative advantage in producing steel.
B) Mexico has a comparative advantage in producing steel.
C) Mexico has an absolute advantage over Canada in producing both steel and airplanes.
D) Canada has a comparative advantage in producing airplanes.
220. (Table) Based on the table:
A) Canada has a comparative advantage in producing airplanes.
B) Mexico has an absolute advantage over Canada in producing both steel and airplanes.
C) Mexico has a comparative advantage in producing airplanes.
D) Mexico has a comparative advantage in producing steel.
221. (Table) Based on the table:
A) only Mexico would gain from trade between the two countries.
B) only Canada would gain from trade between the two countries.
C) neither country would gain from trade between the two countries.
D) both countries can gain from trade.
222. (Tables) Using the table, assume that Canada can produce both timber and oil at an absolute advantage compared to Mexico, yet Canada is willing to trade timber from Canada for oil from Mexico. Why might Canada be willing to focus on timber and allow Mexico to produce the oil?
A) Mexico has better trade routes north to Canada.
B) Canada sees this tradeoff as a form of charity.
C) Comparative advantage allows both countries to specialize in the items for which they have the lowest opportunity cost and allows for mutual benefits.
D) Canada is hoping to tax the oil heavily as it is imported.

Use the following to answer questions 223-225:
Figure: Turtletopia and Frogland PPFs


223. (Figure: Turtletopia and Frogland PPFs) $\qquad$ has the absolute advantage for producing corn, and $\qquad$ has the absolute advantage for producing pork.
A) Turtletopia; Turtletopia
B) Frogland; Frogland
C) Turtletopia; Frogland
D) Frogland; Turtletopia
224. (Figure: Turtletopia and Frogland PPFs) $\qquad$ has the comparative advantage for producing corn, and $\qquad$ has the comparative advantage for producing pork.
A) Turtletopia; Turtletopia
B) Frogland; Frogland
C) Turtletopia; Frogland
D) Frogland; Turtletopia
225. (Figure: Turtletopia and Frogland PPFs) We see that the two countries $\qquad$ benefit from trade, and that Frogland should specialize in producing $\qquad$ while Turtletopia should specialize in producing $\qquad$ -.
A) would not; both products for their own use; both products for their own use
B) would; neither good; both goods
C) would; corn; pork
D) would; pork; corn

Use the following to answer questions 226-228:

|  | U.S. Production Possibilities <br> Bread <br> (loaves) | Avocados <br> (bushels) |  |
| :---: | :---: | :---: | :---: |
| A | 100 | 0 |  |
| B | 80 | 10 |  |
| C | 60 | 20 |  |
| D | 40 | 30 |  |
| E | 20 | 40 |  |
| F | 0 | 50 |  |
|  | Chile Production Possibilities |  |  |
|  | Bread | Avocados |  |
|  | (boashels) |  |  |
| (loaves) | 15 | 0 |  |
| G | 12 | 12 |  |
| H | 9 | 24 |  |
| I | 6 | 36 |  |
| J | 3 | 48 |  |
| K | 0 | 60 |  |
| L | 0 |  |  |

226. (Table) Given the production possibilities schedules for the United States and Chile, which product should Chile produce if it is to produce the good for which it has a comparative advantage?
A) bread
B) avocados
C) neither bread nor avocados
D) both bread and avocados
227. (Table) Given the production possibilities schedules for the United States and Chile, which product should the United States produce if it is to produce the good for which it has a comparative advantage?
A) bread
B) avocados
C) neither bread nor avocados
D) both bread and avocados
228. (Table) Allow the United States to produce at point C and Chile to produce at point K on the production possibilities schedules. Now, let the United States trade away 6 loaves of bread to Chile in return for 20 bushels of avocados. Which of the following statements is TRUE?
A) Both countries are made better off from this trade because they both consume outside their PPF.
B) Both countries are made better off from this trade because they both produce outside their PPF.
C) Only the United States is made better off from this trade.
D) Only Chile is made better off from this trade.
229. Suppose the United States must give up the production of one gallon of paint to produce 1 pair of shoes. Mexico must give up 2 gallons of paint to produce one pair of shoes. According to the principle of comparative advantage:
A) there are no benefits to specialization and trade.
B) Mexico should specialize in producing paint, the United States in producing shoes.
C) Mexico should specialize in producing shoes, the United States in producing paint.
D) the United States should produce both because it has an absolute advantage in both products.

Use the following to answer questions 230-231:
Figure: Wheat and Autos in the United States and Korea

230. (Figure: Wheat and Autos in the United States and Korea) According to the graph, for every extra:
A) bushel of wheat the United States wants to produce, it must give up 100 cars.
B) car South Korea wants to produce, it must give up 40,000 bushels of wheat.
C) car the United States wants to produce, it must give up 100 bushels of wheat.
D) car South Korea wants to produce, it must give up half a bushel of wheat.
231. (Figure: Wheat and Autos in the United States and Korea) According to the graph:
A) the United States should import cars and export wheat.
B) the United States should produce both products because it has an absolute advantage in both.
C) the United States should export cars and import wheat.
D) South Korea should produce neither product because it does not possess an absolute advantage.

Use the following to answer questions 232-234:
Figure: Biscuits and Cookies PPFs

232. (Figure: Biscuits and Cookies PPFs) Greg and Melissa face the production possibilities frontiers shown for biscuits and cookies. When Greg completely specializes in producing the good he has a comparative advantage in, he produces:
A) 100 biscuits and 200 cookies.
B) 0 biscuits and 200 cookies.
C) 50 biscuits and 100 cookies.
D) 100 biscuits and 0 cookies.
233. (Figure: Biscuits and Cookies PPFs) Greg and Melissa face the production possibilities frontiers shown for biscuits and cookies. When Melissa completely specializes in producing the good she has a comparative advantage in, she produces:
A) 160 biscuits and 80 cookies.
B) 0 biscuits and 80 cookies.
C) 80 biscuits and 40 cookies.
D) 160 biscuits and 0 cookies
234. (Figure: Biscuit and Cookies PPFs) Greg and Melissa face the production possibilities frontiers shown for biscuits and cookies. Assume that Greg and Melissa trade 60 biscuits for 60 cookies after they have completely specialized in producing the good in which they have a comparative advantage. We know that Greg and Melissa are each made better off with specialization and trade than acting alone because:
A) they are both producing outside their production possibilities frontier.
B) they are both consuming outside their production possibilities frontier.
C) Greg is producing outside his production possibilities frontier.
D) Melissa is producing outside her production possibilities frontier.
235. The key benefit of countries engaging in trade based on comparative advantage is that:
A) both countries will be able to consume more than with no trade.
B) it allows countries to produce efficiently inside their individual PPFs.
C) it allows both countries to maximize their opportunity cost.
D) None of these is a key benefit.
236. According to the law of comparative advantage, when one country sells goods for which it has the comparative advantage in production and buys goods for which it does not have the comparative advantage:
A) total output will fall.
B) buyers of goods will win and sellers of goods will lose.
C) total output to each person can be expanded.
D) sellers of goods will win and buyers of goods will lose.
237. If a country wants to maximize its GDP, it should always:
A) export goods in which it has an absolute advantage.
B) import goods in which it has an absolute advantage.
C) export goods in which it has a comparative advantage.
D) import goods in which it has a comparative advantage.
238. Trade can benefit society as a whole because it allows:
A) for a more efficient use of resources.
B) for goods to be obtained at a lower opportunity cost.
C) people to specialize in activities in which they have a comparative advantage.
D) All of these make trade beneficial to society as a whole.
239. When two countries gain from trade:
A) one country must have an absolute advantage over the other in producing all goods.
B) both countries can move beyond their domestic production possibilities.
C) one country must have a comparative advantage over the other in producing all goods.
D) both countries must be equal in size.
240. All of the following would limit the specialization that accompanies international trade, EXCEPT:
A) increasing domestic labor costs.
B) increasing transportation costs.
C) increasing communication costs.
D) increasing opportunity costs.
241. Which of the following does NOT impose a limit on the amount of international trade?
A) transportation costs
B) some industries losing their domestic markets
C) the danger of overreliance on a small number of products for exports
D) high level of comparative advantage
242. One of the major limits to trade is:
A) transaction costs.
B) comparative advantage.
C) opportunity cost.
D) absolute advantage.
243. The practical constraints on trade include all of the following, EXCEPT:
A) every international transaction involves costs.
B) production possibilities frontiers for nations are linear.
C) production possibilities frontiers exhibit increasing costs and diminishing returns.
D) some industries and individuals in a country may be hurt by an expansion of trade.
244. The limits on international trade include all the following, EXCEPT:
A) transportation and communication costs.
B) increasing opportunity costs and diminishing returns.
C) decreasing opportunity costs and increasing returns.
D) Trade may hurt some industries and individuals within each country.
245. What is one of the risks involved in complete specialization?
A) Economic growth fosters poor moral standards.
B) Specialization in agricultural products can lead to devastation due to the vagaries of the weather.
C) Educational opportunities may be narrowed.
D) Living standards may decrease.
246. Which of the following is among the top five U.S. exports to China?
A) furniture
B) toys
C) soybeans
D) accounting services
247. Which of the following is one of China's top five exports to the United States?
A) furniture
B) cars
C) soybeans
D) accounting services
248. How goods and services are advertised is one of the three basic economic questions that each society must answer.
A) True
B) False
249. The "what" question of the three basic questions is "What price should be charged for a good?"
A) True
B) False
250. Distribution refers to the way an economy allocates to consumers the goods and services it produces.
A) True
B) False
251. In a capitalist society, consumers signal what products they want by their demands.
A) True
B) False
252. Another term for market economy is capitalist economy.
A) True
B) False
253. Only capitalist economies must answer the three basic economic questions.
A) True
B) False
254. Natural resources such as water are included in capital resources.
A) True
B) False
255. As used by economists, the term capital includes the human talent one is born with.
A) True
B) False
256. Economists include mineral deposits, oil, natural gas, and water in their definition of land.
A) True
B) False
257. Natural resources in the production process are called land and their payment is called interest.
A) True
B) False
258. Labor as a factor of production includes the mental but not physical talents of people.
A) True
B) False
259. Capital as a factor of production includes all manufactured products that are used to produce other goods.
A) True
B) False
260. Entrepreneurs combine land, labor, and capital to produce goods and services.
A) True
B) False
261. In economics, capital refers to a company's money resources.
A) True
B) False
262. Capital refers to the total amount of money in hedge and "venture capital" funds.
A) True
B) False
263. Water is included in the definition of land.
A) True
B) False
264. Allocative efficiency ensures that the goods and services in demand by society are produced.
A) True
B) False
265. If a firm produces its mix of output at the lowest possible cost, it is said to achieve production efficiency.
A) True
B) False
266. "Production efficiency" is defined as when the mix of goods and services produced is just what the society desires.
A) True
B) False
267. When the mix of goods and services is produced that is most desired by society, the result is called allocative efficiency.
A) True
B) False
268. The production possibilities frontier graphically represents the combinations of two goods that are possible for a society to produce at full employment.
A) True
B) False
269. The production possibilities frontier (PPF) shows the combinations of output that are both attainable and unattainable.
A) True
B) False
270. An increase in the unemployment rate will shift the production possibilities frontier to the right.
A) True
B) False
271. Any point inside the production possibilities frontier represents an output combination produced at full employment.
A) True
B) False
272. All output combinations on the production possibilities frontier are attainable.
A) True
B) False
273. Opportunity cost applies only to personal purchasing decisions.
A) True
B) False
274. An example of the application of opportunity cost occurs when a government makes the choice between health care spending and military spending.
A) True
B) False
275. Employing resources that are not as well-suited to making a particular product decrease the opportunity cost of producing that product as opposed to other products.
A) True
B) False
276. A production possibilities frontier will have a curved or "bowed out" shape if opportunity costs are increasing.
A) True
B) False

Use the following to answer questions 277-279:
Figure: Tanks and Health Care

277. (Figure: Tanks and Health Care) At point $f$, to produce more tanks, society must give up some amount of health care services.
A) True
B) False
278. (Figure: Tanks and Health Care) The tradeoff in moving from point $a$ to point $c$ is represented by a gain of $\$ 50$ million in health care services and a loss of 2,000 tanks.
A) True
B) False
279. (Figure: Tanks and Health Care) The opportunity cost of moving from point $c$ to point $b$ is about $\$ 50$ million in health care services.
A) True
B) False
280. As it relates to the production possibilities frontier, an increase in technology for one good while holding all else constant will cause a complete outward shift of the production possibilities frontier.
A) True
B) False

Use the following to answer questions 281-282:
Figure: Pork and Corn PPF

281. (Figure: Pork and Corn PPF) It is possible to produce 15 units of corn and 4 units of pork at the same time.
A) True
B) False
282. (Figure: Pork and Corn PPF) Economists can unequivocally tell which point of production is ideal.
A) True
B) False
283. The production possibilities frontier is bowed outward as a result of increasing costs.
A) True
B) False
284. The choice to attend a free college lecture involves no opportunity cost.
A) True
B) False
285. There is no opportunity cost involved when government decides to cut federal taxes.
A) True
B) False
286. The idea that resources are specialized is the reason for increasing opportunity cost.
A) True
B) False
287. Immigration, both legal and illegal, is a component of America's economic growth.
A) True
B) False
288. A nation that consumes most of what it produces will have a lower growth rate than another nation that focuses more on the production of capital goods.
A) True
B) False
289. If a society's production possibilities frontier shifts to the right, the society's standard of living will likely increase.
A) True
B) False
290. Labor and entrepreneurial ability are the principal resources that can be changed through government action.
A) True
B) False
291. Technological improvements in one industry never allow other industries to increase their production with existing resources.
A) True
B) False
292. Adam Smith is credited with first defining the concept of comparative advantage.
A) True
B) False
293. Free trade is known as a positive-sum game because both parties to a transaction can score positive gains.
A) True
B) False
294. A country has to be able to produce both goods at a faster rate in order to have an absolute advantage.
A) True
B) False
295. Absolute advantage is defined as when goods and services are produced at their lowest resource (opportunity) cost.
A) True
B) False
296. If one country has an absolute advantage over another country in producing all goods, the countries will not gain from trading.
A) True
B) False

Use the following to answer question 297:

## Figure: Turtletopia and Frogland PPFs



297. (Figure: Turtletopia and Frogland PPFs) Turtletopia has the absolute advantage in producing both corn and pork.
A) True
B) False
298. A country is said to have an absolute advantage if it can produce more of a good than another country.
A) True
B) False
299. One country has a comparative advantage in producing a good if its opportunity cost to produce that good is lower than that of another country.
A) True
B) False
300. A country should always produce the items in which it has an absolute advantage.
A) True
B) False
301. If there are two goods and two countries, then one country can have both an absolute and a comparative advantage in both goods.
A) True
B) False
302. If countries specialized and then traded, world production would increase.
A) True
B) False
303. Comparative advantage stems from differences in the relative costs of producing goods and services.
A) True
B) False
304. If the United States has a comparative advantage over the France in producing corn, the opportunity cost of the United States producing corn is lower than France's opportunity cost of producing corn.
A) True
B) False
305. If the United States has absolute advantages in producing wheat and automobiles, it should never trade with other countries that produce wheat and automobiles.
A) True
B) False
306. All industries in all countries benefit from increased international trade.
A) True
B) False
307. The effects of the NAFTA have proven that opening up to free trade will always hurt domestic workers.
A) True
B) False
308. Free trade and the law of comparative advantage increase the standard of living for each person in a country.
A) True
B) False
309. If two countries can benefit by trading with each other, no industries in either country may suffer.
A) True
B) False
310. Industries at a comparative disadvantage may find it necessary to decrease their workforce.
A) True
B) False
311. Much of the economic growth we have seen over the past century has been due to population growth.
A) True
B) False
312. The United States imports more electrical goods from China than it exports to China.
A) True
B) False
313. Describe the three basic questions that must be answered for any economy, and provide explanations for each question for both capitalist and more government-controlled economies.
314. Explain how a free market economy decides what to produce.
315. Briefly describe the four types of resources used in production.
316. In a movie theater, what product is produced? Give an example of capital used in the production process.
317. Suppose you are a restaurant owner. What is your output? What resources do you need and how would you classify them under the four categories?
318. Compare and contrast the two types of capital discussed in the textbook. When economists refer to capital, which type do they mean?
319. Describe the role entrepreneurs play in a capitalistic economy.
320. Can a productively efficient economy be allocatively inefficient? Explain.
321. Explain the differences between production and allocative efficiency.

Use the following to answer questions 322-324:
Figure: Tanks and Health Care


| Point | Health Care <br> (millions) | Tanks <br> (hundreds) |
| :---: | :---: | :---: |
| $a$ | 0 | 80 |
| $b$ | 20 | 75 |
| $c$ | 50 | 60 |
| $d$ | 80 | 30 |
| $e$ | 100 | 0 |
| $f$ | 20 | 40 |
| $g$ | 80 | 70 |

322. (Figure: Tanks and Health Care) Refer to the graph and table in the figure and calculate the opportunity costs of moving from points $a$ to $b, b$ to $c$, and $c$ to $d$.
323. (Figure: Tanks and Health Care) Which points in the graph and table are considered attainable and why?
324. (Figure: Tanks and Health Care) Why is the "bowed out" curve shown in the figure a more realistic depiction of the production possibilities frontier than a straight line?
325. Describe how expansion of resources and technological improvements can cause economic growth.
326. Describe how technological improvements in communication lead to increased growth in other industries without additional resources.
327. Explain one strategy that a government can follow to promote economic growth.
328. What can governments do to increase economic growth?
329. There is much debate regarding immigration into the United States. Using a production possibilities frontier graph, show what would happen if all immigration were halted.
330. Economists maintain that there is a tradeoff between current consumption and future consumption. Explain what they mean.
331. Compare and contrast absolute and comparative advantages.
332. Isabel can bake six cakes or 240 muffins in an eight-hour day. Pawel can bake 12 cakes or 360 muffins in an eight-hour day. Who has comparative advantage in cakes, and what is his or her opportunity cost of producing one additional cake?
333. Explain why Country 1, which has an absolute advantage over Country 2 in producing two products (e.g., corn and clothing), would trade with Country 2.
334. Why would it be risky for the Haiti to specialize in sugar cane production even if it has a comparative advantage in this area over most of the globe?

## Answer Key

1. D
2. C
3. A
4. B
5. A
6. C
7. A
8. C
9. C
10. A
11. C
12. B
13. C
14. C
15. A
16. D
17. C
18. D
19. C
20. A
21. B
22. B
23. B
24. C
25. C
26. C
27. C
28. B
29. B
30. A
31. A
32. D
33. A
34. C
35. A
36. D
37. B
38. C
39. A
40. C
41. C
42. B
43. C
44. B
45. B
46. B
47. B
48. A
49. B
50. A
51. B
52. D
53. B
54. D
55. C
56. C
57. C
58. D
59. D
60. C
61. A
62. D
63. B
64. B
65. C
66. A
67. C
68. B
69. B
70. D
71. C
72. D
73. B
74. D
75. B
76. D
77. D
78. C
79. A
80. C
81. C
82. C
83. A
84. C
85. C
86. A
87. B
88. C
89. B
90. C
91. B
92. D
93. A
94. C
95. D
96. C
97. B
98. C
99. B
100. D
101. C
102. C
103. D
104. B
105. C
106. D
107. C
108. B
109. B
110. B
111. D
112. C
113. B
114. A
115. B
116. B
117. C
118. B
119. C
120. B
121. D
122. A
123. A
124. B
125. B
126. A
127. D
128. D
129. B
130. C
131. B
132. C
133. C
134. B
135. B
136. C
137. B
138. B
139. C
140. C
141. B
142. A
143. C
144. D
145. C
146. A
147. D
148. D
149. C
150. A
151. A
152. B
153. C
154. C
155. D
156. C
157. A
158. D
159. A
160. C
161. A
162. A
163. B
164. A
165. A
166. D
167. D
168. A
169. D
170. D
171. B
172. D
173. C
174. A
175. C
176. C
177. D
178. B
179. C
180. D
181. C
182. B
183. C
184. B
185. B
186. B
187. B
188. B
189. D
190. C
191. D
192. B
193. C
194. A
195. B
196. A
197. B
198. B
199. D
200. A
201. B
202. D
203. D
204. B
205. C
206. B
207. B
208. B
209. C
210. B
211. D
212. A
213. D
214. D
215. A
216. C
217. C
218. B
219. A
220. C
221. D
222. C
223. A
224. C
225. D
226. B
227. A
228. A
229. B
230. D
231. A
232. B
233. D
234. B
235. A
236. C
237. C
238. D
239. B
240. A
241. D
242. A
243. B
244. C
245. B
246. C
247. A
248. B
249. B
250. A
251. A
252. A
253. B
254. B
255. B
256. A
257. B
258. B
259. A
260. A
261. B
262. B
263. A
264. A
265. A
266. B
267. A
268. A
269. B
270. B
271. B
272. A
273. B
274. A
275. B
276. A
277. B
278. A
279. B
280. B
281. B
282. B
283. A
284. B
285. B
286. A
287. A
288. A
289. A
290. B
291. B
292. B
293. A
294. B
295. B
296. B
297. A
298. A
299. A
300. B
301. B
302. A
303. A
304. A
305. B
306. B
307. B
308. B
309. B
310. A
311. B
312. A
313. The three basic economic questions that each society must answer are (1) What goods and services are to be produced? (2) How are the goods and services to be produced? (3) Who will receive the goods and services? The response an economy makes to the first question-what to produce-depends on the goods and services a society wants. In a communist state, the government decides what a society wants, but in a capitalist economy consumers are allowed to signal what products they want by way of their demands for specific commodities. Once an economy knows the goods a society wants, the next question the economic system must answer is how the goods and services are to
be produced. In the end, this problem comes down to the simple question of how labor, capital, and land should be combined to produce the desired products. Once an economy has determined what goods and services to produce and how to produce them, it is faced with the distribution question: Who will get the resulting products? Distribution refers to the way an economy allocates the goods and services it produces to consumers. In a capitalist economy, most products are distributed through private markets. In a socialist economy, many goods are produced in state-owned facilities. Theoretically, governments in socialist economies use tax monies to subsidize producers, while governments in capitalist economies leave producers free to survive or perish on the basis of their efficiency and the quality of their products.
314. A free market economy is both consumer-driven and profit-driven. In other words, producers see what goods and services buyers wish to purchase. If there is a strong demand for a particular product, then sellers will see an opportunity and try to fill the demand.
315. The four resources are land, labor, capital, and entrepreneurial ability. Land is a broad term that includes natural resources-in other words, it includes gifts of nature below, on, and above the land. Human resources are called labor, while human-made resources such as tools and machinery are called capital. The ability to combine and manage these resources is called entrepreneurial ability.
316. Entertainment, the showing of movies, etc.; Projector, building, film reels, and so forth.
317. Students may offer various answers for output, from prepared meals to satisfied diners. The food itself comes from land, since it is produced by nature. The work of the staff is labor. Capital would include things such as the stove and refrigerator. The knowledge of the chef in how to prepare the meals would be human capital. The owner, who is ultimately responsible for the smooth running of the restaurant, is the entrepreneur.
318. Capital includes all manufactured products that are used to produce other goods and services-equipment such as drill presses, blast furnaces for making steel, and other tools used in the production process. It also includes trucks and automobiles used by business as well as office equipment, such as copiers, computers, and telephones. Any manufactured product that is used to produce other products is included in the category of capital. Note that the term capital as used by economists refers to real capital-actual manufactured products used in the production process-not money or financial capital. Money and financial capital are important in that they are used to purchase the real capital that is used to create products.
319. Entrepreneurs combine land, labor, and capital to produce goods and services and assume the risks associated with running the business. Entrepreneurs combine and manage the inputs of production and manage the day-to-day marketing, finance, and production decisions.
320. Yes, a productively efficient economy can be allocatively inefficient if it produces goods and services that consumers don't want.
321. Production efficiency occurs when the mix of goods society decides to produce is produced at the lowest possible resource or opportunity cost. Alternatively, production efficiency occurs when as much output as possible is produced with a given amount of resources. Firms use the best technology available and combine the other resources to produce products at the lowest cost to society. Allocative efficiency occurs when the mix of goods and services produced are the most desired by society. In capitalist countries,
this is determined by consumers and businesses and their interaction through markets. Hence, production efficiency focuses on lowest costs and allocative efficiency focuses on the best mix of goods and services.
322. Moving from a to b results in giving up 500 tanks ( 80 to 75 ) to get $\$ 20$ million ( 0 to 20) more in health care (or 100 tanks for $\$ 4$ million in health care, or 1 tank for $\$ 40,000$ ). Moving from b to c results in giving up 1,500 tanks ( 75 to 60 ) to get $\$ 30$ million (20 to 50) more in health care (or 100 tanks for $\$ 2$ million in health care, or 1 tank for $\$ 20,000$ in health care). Moving from c to d results in the giving up 3,000 tanks (60 to 30) to get $\$ 30$ million (50 to 80) more in health care (or 100 tanks for $\$ 1$ million in health care, or 1 tank for \$10,000).
323. All points on the PPF curve (points $\mathrm{a}, \mathrm{b}, \mathrm{c}, \mathrm{d}, \mathrm{e}$ ) are considered attainable by our economy. Everything to the left of the PPF curve (point f) is also attainable but is an inefficient use of resources-the economy can always do better. Everything to the right of the curve (point g ) is considered unattainable. Therefore, the PPF maps out the economy's limits; it is impossible for the economy to produce at levels beyond the PPF.
324. This PPF curve is bowed out from the origin, since opportunity costs rise as more factors are used to produce increasing quantities of one product. To describe what has happened in plain terms, when the economy was producing 8,000 tanks, all its resources went into tank production. The members of the labor force who are doctors and nurses were probably not well-suited to producing tanks. As the economy decreased its production of tanks to start producing health care services, the opportunity cost of health care services was low, since the resources first shifted, including workers, were likely to be the ones most suited to health services and least suited to tank manufacture. Eventually, however, as health care services became the dominant product, providing more health care required shifting tank-manufacturing workers to the health care industry. Employing these less-suitable resources drives up the opportunity costs of health care.
325. The expansion of resources allows producers to increase their production of all goods and services in an economy. Specific technological improvements, however, often affect only one industry directly. The development of a new color printing process, for instance, will directly affect only the printing industry. Nevertheless, the ripples from technological improvements can spread throughout an entire economy, just like ripples in a pond. Specifically, improvements in technology can lead to new products, improved goods and services, and increased productivity.
326. Sometimes technological improvements in one industry allow other industries to increase their production with existing resources: producers can produce more output without using added labor or other resources. Alternatively, they can get the same production levels as before while using fewer resources than before, freeing resources in the economy for use in other industries. Better communication with the use of cell phones or the Internet, for example, allows insurance agents to file claims instantly from disaster sites and deals to be closed while one is stuck in traffic; and communications have been revolutionized. Thus, this new technology has ultimately expanded time, the most finite of our resources. The Internet has profoundly changed how many products are bought, sold, and delivered, and it has expanded communications and the flow of information.
327. Increasing business investment (physical capital); increasing average education levels
(human capital); increasing research and development; reducing both the level and variability of inflation; reducing the tax burden; increasing the level of international trade.
328. Greater investment by business (physical capital), higher levels of education (human capital), higher levels of research and development, lower inflation rates, reduced tax burdens, and greater levels of international trade all result in higher standards of living (per capita GDP). Trying to discover why some countries grow and others do not is a complex undertaking and has occupied economists for several centuries. A country can achieve greater economic growth and raise its standard of living by expanding trade with other countries.
329. Labor, whether domestic or immigrant, is an economic resource. Hence, if there were fewer workers because of highly restrictive immigration policies, then the production possibilities frontier would shift to the left.
330. Resources can be used to produce either consumption goods (goods that will be used up in a short period of time) or capital (goods that are used to produce other goods). If resources are used to build factories and other forms of capital, then more could be produced in the future. However, the opportunity cost of building future production capabilities is current consumption goods.
331. An absolute advantage exists when one country can produce more of a good than can another country. One country has a comparative advantage in producing a good if its opportunity cost to produce that good is lower than the other country's.
332. Pawel has comparative advantage - a single cake costs him 30 muffins. In contrast, one cake costs Isabel 40 muffins.
333. Even though Country 1 has an absolute advantage over Country 2 in producing corn and clothing, Country 2 may have a comparative advantage in producing corn if its opportunity cost to produce corn is lower than the opportunity cost of Country 1 to produce corn. Hence, both countries could still benefit from trading with each other.
334. First, every transaction involves costs, including transportation, communications, and the general costs of doing business. Even so, over the last several decades, transportation and communication costs have been declining all over the world, resulting in growing global trade. Second, the production possibilities frontiers for nations are not linear but rather are governed by increasing costs and diminishing returns. Therefore, it is difficult for countries to specialize in producing one product. Complete specialization would be risky, moreover, since the market for a product can always decline, perhaps because the product becomes technologically obsolete. Alternately, changing weather patterns can wreak havoc on specialized agriculture products, adding further instability to incomes and exports in developing countries. Finally, though two countries may benefit from trading with one another, expanding trade may hurt some industries and individuals in each country. Notably, industries finding themselves at a comparative disadvantage may be forced to scale back production and lay off workers. In such instances, the government may need to provide workers with retraining, relocation, and other help to ensure a smooth transition to the new production mix.
