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

1) All of the following, except one, is demand. Which is the exception?
2) $\qquad$
A) The relationship between various prices and quantities demanded for a product.
B) The quantities which consumers want to buy.
C) A hypothetical construct which expresses the desire and ability to purchase, not at a single price, but over a range of prices.
D) The quantities which consumers are willing and able to buy per period of time at various prices.
3) What is the term for the quantities which consumers are willing and able to buy per period of time at various prices?
A) Desire.
B) Supply.
C) Market.
D) Human wants.
E) Demand.
4) What is the term for a table that shows the various quantities demanded per period of time at different prices?
A) Supply schedule.
B) Production possibilities table.
C) Market schedule
D) Schedule of equilibrium points.
E) Demand schedule.
5) What is meant by the term change in the quantity demanded?
6) 
7) 

A) The change in the quantity which results from a change in any factor other than the price and implies a movement along the demand curve.
B) The change in the quantity which results from a change in any factor other than the price and implies a shift in the demand curve.
C) The change in the quantity which results from a price change and implies a movement along the demand curve.
D) The change in the quantity which results from a price change and implies a shift in the demand curve.
5) What is the most likely reason that your instructor does not have a demand for a
5) $\qquad$ top-of-the-line BMW?
A) He or she would prefer to own no car at all.
B) He or she cannot afford to own such an expensive car.
C) He or she does not wish to own such an expensive car.
D) He or she does not want to own a German-made car.
6) What is meant by the term ceteris paribus?
A) Other things being equal.
B) Prices remain constant.
C) A downward-sloping demand
D) All things vary. curve.
7) What is the correct way to label the axis on a graph which illustrates a demand
c urve
A) Quantity on horizontal axis and price on the vertical axis.
B) Price on horizontal axis and quantity on the vertical axis.
C) Income on the horizontal axis and price on the vertical axis.
D) Price on the horizontal axis and income on the vertical axis.
8) What is the term for income measured by the amount of goods and services which it will buy?
A) Income effect.
B) Real income.
C) Actual income.
D) Net income.
E) Nominal income.
9) What is the term for the total demand for a product by all consumers?
A) Product market.
B) Market Supply.
C) Quota.
D) Market Demand.
E) Schedule of wants.
10) What is market demand?
A) The desire to purchase cheaper competing products rather than relatively more expensive products.
B) The substitution of one product for another as a result of a change in their relative prices.
C) An increase or decrease in prices based on the quantity demanded of a product.
D) The total demand for a product by all consumers.
11) What is the income effect?
A) The effect of a change in income on the demand for a substitute product.
B) The effect of a price change on real income and therefore on the quantity demanded of a product.
C) The effect of a change in income on the demand for an inferior product.
D) The effect of a change in income on the demand for a product.
12) What is the substitution effect?
11) $\qquad$
A) The sacrifice which has to be made when an additional quantity of one product is purchased.
B) The substitution of one product for another as a result of a change in their relative prices.
C) The effect that a change in income has on the demand for a substitute product.
D) The substitution of a normal product for an inferior product as the result of an increase in income.
13) What is the term for the substitution of one product for another as a result of a
8) $\qquad$
9) $\qquad$
10) $\qquad$

12) $\qquad$ change in their relative prices?
A) Market effect.
B) Law of demand.
$\qquad$
C) Income effect.
D) Substitution effect.
14) What is the effect of a decrease in the price of a product?
14)
A) It will increase the demand.
B) It will increase the quantity demanded.
C) It will decrease the quantity demanded.
D) It will decrease the demand.
15) What is the term for the effect which a price change has on real income and therefore
15) $\qquad$ on the quantity demanded of a product?
A) Market demand.
B) Opportunity cost.
C) Change in the quantity demanded.
D) Substitution effect.
E) Income effect.
16) Which of the following is explained by the combination of the substitution effect and the income effect?
A) Downward sloping demand
B) Market demand. curves.
C) Equilibrium price.
D) Ceteris paribus.
17) Which of the following is explained by the combination of the substitution effect and the income effect?
A) The direct relationship between price and quantity demanded.
B) Equilibrium price.
C) Market demand.
D) The inverse relationship between price and quantity demanded.
18) What is supply?
A) The quantity sold at a certain price.
B) The total demand for a product by all consumers.
C) The quantities which producers are both willing and able to sell per period of time at various prices.
D) The quantity which prevails at the equilibrium price.
19) What is the term for a table showing the various quantities supplied per period of time at different prices?
A) Market supply.
B) Price schedule.
C) Supply schedule.
D) Demand schedule.
20) What is the term for a change in the amounts that a producer is willing and able to make available as a result of a price change?
A) Change in the market supply.
B) Change in the quantity supplied.
C) Change in the market demand.
D) Change in the individual supply.
21) What is the term for the quantities which producers are willing and able to sell per
$\qquad$ period of time at various prices?
A) Supply.
B) Surplus.
C) Product availability.
D) Quantity supplied.
E) Quantity demanded.
22) What is supply?
22) $\qquad$
A) The quantities that producers are willing and able to sell per period of time at various prices.
B) The quantity made available by a typical producer.
C) The maximum possible quantity that producers could make available.
D) The total quantity of goods produced but not sold.
23) What is the term for the total supply of a product offered by all producers?
A) Aggregate supply.
B) Market Supply.
C) Equilibrium quantity.
D) Saturation point.
24) What is market supply?
A) The total supply of a product offered by all producers.
B) The surplus over and above the market demand.
C) The total supply of a product demanded by all consumers.
D) The total quantity sold in a market.
25) What is the effect of an increase in the price of a product?
A) An increase in supply.
B) A decrease in supply.
C) A decrease in the quantity supplied.
D) An increase in the quantity supplied.
26) Graphically, what is the effect of a decrease in the price of a product?
A) A rightward shift in the supply curve.
B) A leftward shift in the supply curve.
C) A leftward movement on the supply curve.
D) A rightward movement on the supply curve.
27) What is the term for the mechanism which brings buyers and sellers together to assist them in negotiation the exchange of products?
A) Supply and demand.
B) Opportunity cost.
C) Laissez-faire.
D) Production possibilities.
E) The market.
28) Which of the following is not a result of the greater availability of electronic communication?
A) Supply chain bottlenecks are increasing.
B) Buyers have access to more information.
C) The need to stockpile inventory is diminishing.
D) The sellers markets are expanding.
29) Which of the following is a result of the greater availability of electronic communication?
A) There is more emphasis on personal service in the market.
B) Markets are becoming more efficient.
C) Markets are becoming smaller.
D) Markets are becoming inefficient.
30) What is the equilibrium price? $\qquad$
A) The price at which the quantity demanded equals the quantity supplied.
B) The price at which there is no surplus, but there may be a shortage.
C) The price at which there is no shortage, but there may be a surplus.
D) The price at which everyone is able to buy the quantities they desire.
E) The price that both buyers and sellers agree is fair.
31) If the price of a product does not change immediately, which of the following will cause an initial surplus of a product?
A) An increase in the demand or an increase in the supply.
B) A change in the quantity demanded.
C) A decrease in the demand or an increase in the supply.
D) A decrease in the demand or a decrease in the supply.
E) An increase in the demand or a decrease in the supply.
32) If the price of a product does not change immediately, which of the following will cause an initial shortage of a product?
A) An increase in the demand or a decrease in the supply.
B) A decrease in the demand or an increase in the supply.
C) An increase in the demand or an increase in the supply.
D) A decrease in the demand or a decrease in the supply.
E) A change in the quantity supplied.

33) Refer to the graph above to answer this question. What is the effect if the price is
33) $\qquad$ $\$ 800$ ?
A) There is a shortage of 60 .
B) 160 will be purchased.
C) The price will increase.
D) There is a shortage of 30 .
E) There is a surplus of 30 .
34) Refer to the graph above to answer this question. What is the effect if the price is $\$ 1,000$.
A) There is neither a shortage nor a surplus.
B) Price will fall.
C) The quantity traded is 100 .
D) Price will rise
35) Refer to the graph above to answer this question. What is the effect if the price is \$1,200.
A) The quantity demanded is 120 .
B) The quantity supplied is 160 .
C) Price will rise
D) The quantity traded is 120 .
36) Refer to the graph above to answer this question. What is the effect if the price is $\$ 600$.
A) The quantity supplied is 120 .
B) Price will fall.
C) The quantity demanded is 120 .
D) The quantity traded is 40 .
37) Refer to the graph above to answer this question. What would be the new equilibrium
37) $\qquad$ price and quantity if demand increased by 60 ?
A) $\$ 1,000$ and 140 .
B) $\$ 1,600$ and 120 .
C) $\$ 1,200$ and 160 .
D) $\$ 1,400$ and 140 .
E) $\$ 1,000$ and 180 .
38) Refer to the graph above to answer this question. What would be the new equilibrium price and quantity if demand decreased by 60 ?
A) $\$ 800$ and 80 .
B) $\$ 1,400$ and 60
C) $\$ 1,400$ and 80 .
D) $\$ 1,000$ and 80 .
39) Refer to the graph above to answer this question. What would be the new equilibrium price and quantity if supply increased by 120 ?
A) $\$ 1,000$ and 240 .
B) $\$ 600$ and 160 .
C) $\$ 800$ and 140 .
D) $\$ 600$ and 240 .
40) Refer to the graph above to answer this question. What would be the new equilibrium
40) $\qquad$ price and quantity if supply decreased by 120 ?
A) $\$ 800$ and 80 .
B) $\$ 1,000$ and 40 .
C) Supply would be zero.
D) $\$ 1,400$ and 80 .

41) Refer to the above graph to answer this question. What are the implications if the
41) $\qquad$ price of this product is $\$ 8$ ?
A) The price would be above equilibrium.
B) There would be a shortage of 600 units.
C) There would be a surplus of 600 units.
D) There would be a shortage of 300 units.
E) There would be a surplus of 300 units.
42) Refer to the above graph to answer this question. If the price of the product is $\$ 8$, how many units would be sold?
A) 400 units.
B) 800 units.
C) 500 units.
D) 600 units.
E) Cannot be determined.
43) Refer to the above graph to answer this question. What is the maximum price the quantity sold at a price of $\$ 8$ could have been sold for?
A) $\$ 8$.
B) $\$ 12$.
C) $\$ 10$.
D) $\$ 14$.
E) Cannot be determined.
44) Refer to the above graph to answer this question. What are the implications if the price of this product is $\$ 14$ ?
A) The price would be below equilibrium.
B) There would be a surplus of 1,200 units.
C) There would be a shortage of 1,200 units.
D) There would be a shortage of 600 units.
E) There would be a surplus of 600 units.
45) Refer to the above graph to answer this question. If the price of the product is $\$ 14$,
45) $\qquad$
46) $\qquad$ quantity sold at a price of $\$ 14$ could have been sold for?
A) $\$ 6$.
B) $\$ 12$.
C) $\$ 10$.
D) $\$ 8$.
E) Cannot be determined.
47) What is the name of those products whose demand will increase as a result of an increase in income?
A) Substitute products.
B) Inferior products.
C) Normal products.
D) Complementary products.
48) What is the term for those products whose demand will decrease as a result of an $\qquad$ increase in income and will increase as a result of a decrease in income?
A) Inferior products.
B) Complementary products.
C) Substitute products.
D) Related products.
E) Normal products.
49) What is the term for those products which consumers see as interchangeable (one for the other)?
A) Substitute products.
B) Normal products.
C) Complementary products.
D) Inferior products.
50) What is the term for those products which tend to be purchased jointly and whose demands therefore are related?
A) Normal products.
B) Inferior products.
C) Substitute products.
D) Complementary products.
51) What is a normal product?
A) It is a product which consumers buy more of as their incomes increase.
B) It is a product which consumers buy more of as their incomes decrease.
C) It is a product which consumers buy less of as their incomes increase.
D) It is a product which consumers buy regularly.
52) What is an inferior product?
52) $\qquad$
A) It is a product which consumers buy more of as their incomes increase.
B) It is a product which consumers buy less of as their incomes decrease.
C) It is a low-quality luxury product.
D) It is a product which consumers buy less of as their incomes increase.
53) What is true of substitute products?
A) When the price of one decreases, the quantity purchased of the other increases.
B) They are products which are always purchased together.
C) When the price of one increases, the quantity purchased of the other decreases.
D) When the price of one increases, the quantity purchased of the other increases.
54) What is true of complementary products?
A) They are products which compete with one another.
B) When the price of one increases, the quantity purchased of the other decreases.
C) When the price of one decreases, the quantity purchased of the other decreases.
D) When the price of one increases, the quantity purchased of the other increases.
55) Which of the following pairs of products are substitutes?
54)
53) $\qquad$
$\qquad$
55) $\qquad$
A) Grapes and wine.
B) Grapes and grapefruits.
C) Grapefruits and wine.
D) Grapes and beer.
E) Grapefruit juice and beer.
56) Which of the following pairs of products are complements?
A) Steel and oil.
B) Automobiles and steel.
C) Cameras and films.
D) Bread and flour.
E) Flour and wheat.
57) What is the relationship between computers and printers?
A) They are competitive products.
B) They are complementary products.
C) They are cooperative products.
D) They are rival products.
E) They are substitute products.
58) What is the relationship between pizzas and hamburgers?
A) They are cooperative products.
B) They are substitute products.
C) They are complementary products.
D) They are unrelated products.
E) They are customary products.
59) What will cause the demand for a normal product to increase?
A) An increase in the price of a complementary product.
B) The expectation by consumers that future prices will be higher.
C) A decrease in the size of the population.
D) A decrease in the price of a substitute product.
E) A decrease in income levels.
60) What will cause the demand for a normal product to decrease?
A) An increase in income levels.
B) An increase in the size of the population.
C) An increase in the price of a complementary product.
D) The expectation by consumers that future prices will be higher.
E) An increase in the price of a substitute product.
61) All of the following except one will cause the demand for a normal product to
61) $\qquad$ decrease. Which is the exception?
A) A decrease in the price of a substitute product.
B) A decrease in consumer incomes.
C) The fear of consumers of a future recession.
D) The expectation by consumers that the future price will be higher.
E) An increase in the price of a complementary product.
62) All of the following except one will cause the demand for a normal product to
62) $\qquad$ increase. Which is the exception?
A) An increase in consumer incomes.
B) The fear of consumers of a future strike in the industry.
C) An increase in the price of a substitute product.
D) The expectation by consumers that the future price will be higher.
E) An increase in the price of a complementary product.
63) What is the effect on an inferior product if income increases?
A) It will cause an increase in the quantity demanded.
B) It will cause an increase in demand.
C) It will cause an increase in supply.
D) It will cause a decrease in supply.
E) It will cause a decrease in demand.
64) What is the effect on a normal product if income increases?
A) It will cause an increase in the quantity demanded.
B) It will cause an increase in demand.
C) It will cause an increase in supply.
D) It will cause a decrease in demand.
E) It will cause a decrease in supply.
65) What is the effect of consumers' expecting that the future price of a product will increase?
A) It will cause an increase in demand.
B) It will cause a decrease in the quantity demanded.
C) It will cause a decrease in supply.
D) It will cause an increase in the quantity demanded.
E) It will cause a decrease in demand.
66) What is the effect on product A of an increase in the price of substitute product B ?
66) $\qquad$
A) It will cause a decrease in demand.
B) It will cause a decrease in supply.
C) It will cause an increase in supply.
D) It will cause an increase in the quantity demanded.
E) It will cause an increase in demand.
67) What is the effect on product A of an increase in the price of complementary product B ?
A) It will cause an increase in the quantity demanded.
B) It will cause a decrease in supply.
C) It will cause an increase in demand.
D) It will cause a decrease in demand.
E) It will cause an increase in supply.

The following table shows the initial weekly demand (D1) and the new demand (D2) for packets of pretzels (a bar snack):

| Price(\$) | Quantity <br> Demanded (D1) | Quantity <br> Demanded (D2) |
| :---: | :---: | :---: |
| 1.00 | 1,000 | 1,100 |
| 1.50 | 980 | 1,080 |
| 2.00 | 960 | 1,060 |
| 2.50 | 940 | 1,040 |
| 3.00 | 920 | 1,020 |

68) Refer to the information above to answer this question. In order to produce the change in demand from D1 to D2, what might have happened to the price of a substitute product like a packet of nuts?
A) It has increased.
B) It has not changed, but people must be buying more.
C) It has decreased.
D) It has not changed, but people must be buying less.
69) Refer to the information above to answer this question. In order to have produced the
70) $\qquad$ change in demand from D1 to D2, what might have happened to the price of a complementary product like beer?
A) It has not changed, but people must be buying more.
B) It has decreased.
C) It has not changed, but people must be buying less.
D) It has increased.

The product is a normal product.

70) Refer to the graph above to answer this question. All of the following except one could have caused the shift from D1 to D2. Which is the exception?
A) Growth in the size of the market.
B) An increase in the price of a complement good.
C) An increase in the price of a substitute good.
D) An increase in income.
71) Refer to the graph above to answer this question. What does the distance Q1- Q2 represent?
A) A shortage at price P1.
B) An increase in the quantity demanded.
C) A surplus at price P1.
D) The result of a decrease in income.
72) Refer to the graph above to answer this question. What does the distance Q1 to Q3 represent?
A) The increase in equilibrium quantity traded resulting from an increase in quantity supplied.
B) The decrease in equilibrium quantity traded resulting from an increase in demand.
C) A shortage at price P2.
D) The increase in equilibrium quantity traded resulting from an increase in quantity demanded.
E) The increase in equilibrium quantity traded resulting from an increase in demand.
73) Refer to the graph above to answer this question. Which of the following statements is correct?
A) Both $a b$ and $a c$ represent an increase in demand.
B) While $a b$ represents an increase in demand, $a c$ represents an increase in supply.
C) Both $a b$ and $a c$ represent an increase in the quantity demanded.
D) Both $a b$ and $c b$ represent an increase in demand.
E) While $a c$ represents an increase in demand, $a b$ represents an increase in the quantity supplied.
74) What will cause the supply of a product to increase?
70) $\qquad$
71) $\qquad$
72) $\qquad$
73) $\qquad$

A) A decrease in the number of suppliers.
B) The expectation of producers that the future price will be higher.
C) An increase in the price of a productively related product.
D) An improvement in the technology of producing the product.
E) An increase in the price of resources.
75) What will cause the supply of a product to decrease?
A) A decrease in the price of resources.
B) The expectation of producers that the future price will be lower.
C) An increase in the price of a substitute in production.
D) An improvement in the technology of producing the product.
E) An increase in the number of suppliers.
76) All of the following except one will cause the supply of a product to decrease. Which is the exception?
A) An increase in the price of resources.
B) An increase in business taxes.
C) A decrease in the price of a substitute in production.
D) The expectation of suppliers that the future price of the product will be higher.
E) A decrease in the number of suppliers.
77) All of the following except one will cause the supply of a product to increase. Which is the exception?
A) The expectation of suppliers that the future price of the product will be lower.
B) An increase in business taxes.
C) A decrease in the price of a substitute in production.
D) A decrease in the price of resources.
E) An improvement in technology.
78) What is the effect of a decrease in the supply of a product?
A) It will cause an increase in the price but a decrease in the quantity traded.
B) It will cause a decrease in the price but an increase in the quantity traded.
C) It will cause a decrease in both the price and in the quantity traded.
D) It will cause an increase in both the price and in the quantity traded.

79) Refer to the graph above to answer this question. All of the following except one
A) A decrease in income.
B) An increase in the sales tax.
C) A decrease in the number of suppliers.
D) An increase in the price of a substitute in production.
80) Refer to the graph above to answer this question. What does the distance Q1- Q2 represent?
A) The result of a decrease in the sales tax.
B) A shortage at price P1.
C) A surplus at price P1.
D) A decrease in the quantity supplied.
81) Refer to the graph above to answer this question. What does the distance Q1-Q3 represent?
A) The decrease in equilibrium quantity traded resulting from a decrease in demand.
B) The decrease in equilibrium quantity traded resulting from an increase in the quantity supplied.
C) The decrease in equilibrium quantity traded resulting from a decrease in supply.
D) The decrease in equilibrium quantity traded resulting from a decrease in the quantity supplied.
82) Refer to the graph above to answer this question. Which of the following statement is
80) $\qquad$
$\qquad$
82) $\qquad$ correct?
A) While $a c$ represents a decrease in supply, $a b$ represents a decrease in demand.
B) While $a c$ represents a decrease in supply, $a b$ represents a decrease in the quantity demanded.
C) Both $a b$ and $a c$ represent a decrease in supply.
D) Both $a b$ and $a c$ represent a decrease in the quantity supplied.

| Price | Quantity Demanded | Quantity Supplied 1 |
| ---: | :---: | :---: |
| $\$ 40.0$ | 140 | 60 |
| 42.5 | 130 | 70 |
| 45.0 | 120 | 80 |
| 47.5 | 110 | 90 |
| 50.0 | 100 | 100 |
| 52.5 | 90 | 110 |
| 55.0 | 80 | 120 |
| 57.5 | 70 | 130 |
| 60.0 | 60 | 140 |

83) Refer to the above information to answer this question. What are the equilibrium
84) $\qquad$ values of price and quantity?
A) $\$ 55$ and 120 .
B) $\$ 52.50$ and 100 .
C) $\$ 50$ and 100 .
D) $\$ 40$ and 140 .
E) $\$ 40$ and 60 .
85) Refer to the above information to answer this question. What is true if price is $\$ 45$ ?
86) $\qquad$
A) The quantity supplied is 200 .
B) There is a shortage of 40 .
C) The quantity demanded is 80 .
D) Price will soon fall.
E) There is a surplus of 40 .
87) Refer to the above information to answer this question. What is true if price is
88) $\qquad$ $\$ 52.50$ ?
A) Price will soon rise.
B) There is a shortage of 40 .
C) The quantity supplied is 90 .
D) There is a surplus of 110 .
E) The quantity demanded is 90 .
89) Refer to the above information to answer this question. If demand increases by 20 units, what will be the new values of equilibrium price and quantity?
A) $\$ 55$ and 120 .
B) $\$ 50$ and 120 .
C) $\$ 52.50$ and 110 .
D) $\$ 45$ and 120 .
E) $\$ 52.50$ and 120 .
90) Refer to the above information to answer this question. If supply increases by 40 units, what will be the new values of equilibrium price and quantity?
A) $\$ 60$ and 120.
B) $\$ 60$ and 140 .
C) $\$ 45$ and 120 .
D) $\$ 50$ and 140 .
E) $\$ 40$ and 140 .
91) Refer to the above information to answer this question. If both demand and supply increase by 40 units, what will be the new values of equilibrium price and quantity?
A) $\$ 60$ and 100 .
B) $\$ 40$ and 140 .
C) $\$ 60$ and 140 .
D) The price will be $\$ 50$ but equilibrium is not possible.
E) $\$ 50$ and 140 .
92) What is the effect of an increase in the price of resources?
93) $\qquad$
A) It will cause an increase in supply.
B) It will cause a decrease in supply.
C) It will cause a decrease in the quantity supplied.
D) It will cause an increase in demand.
E) It will cause a decrease in demand.
94) What is the effect of an improvement in technology?
A) It will cause an increase in demand.
B) It will cause a decrease in supply.
C) It will cause a increase in the quantity supplied.
D) It will cause a decrease in demand.
E) It will cause an increase in supply.
95) What is the effect of a decrease in business taxes?
A) It will cause an increase in the quantity supplied.
B) It will cause a decrease in demand.
C) It will cause a decrease in supply.
D) It will cause an increase in supply.
E) It will cause an increase in demand.
96) What is the effect of producers' expecting that the future price of a product will
97) $\qquad$
98) $\qquad$ decrease?
A) It will cause a decrease in demand.
B) It will cause a decrease in supply.
C) It will cause an increase in the quantity supplied.
D) It will cause an increase in demand.
E) It will cause an increase in supply.

Price (\$million)
$\$ 10$
\$20
$\$ 30$
$\$ 40$
$\$ 50$
$\$ 60$
$\$ 70$
\$80

Quantity Demanded
10
9
8
7

## 6

5
4
3

Quantity Supplied

If the market price for a limited number of hotels in the downtown business district area depends on supply and demand.
93) Refer to the above information to answer this question. What are the equilibrium
93) $\qquad$ values of price and quantity?
A) $\$ 60$ million and 6
B) $\$ 50$ million and 6 .
C) $\$ 80$ million and 6 .
D) $\$ 10$ million and 6 .
E) $\$ 30$ million and 6 .
94) Refer to the above information to answer this question. If two of the hotels have been
94) $\qquad$ purchased, what are the new equilibrium values of price and quantity?
A) $\$ 70$ million and 6.
B) $\$ 60$ million and 4 .
C) $\$ 70$ million and 4 .
D) $\$ 80$ million and 6 .
E) $\$ 60$ million and 6 .
95) Refer to the above information to answer this question. If two new buyers enter this
95) $\qquad$ market, what are the new equilibrium values of price and quantity?
A) $\$ 80$ million and 8 .
B) $\$ 60$ million and 8 .
C) $\$ 70$ million and 6 .
D) $\$ 70$ million and 7 .
E) $\$ 60$ million and 6 .

## Price (\$million)

\$1.2
\$1.3
\$1.4
$\$ 1.5$
$\$ 1.6$
\$1.7
\$1.8
$\$ 1.9$
\$2.0

## Quantity Demanded Quantity Supplied

## 18

## 17

16
15
14
13
12

18
18
18
18
18
18
18
18
18

The above information are supply and demand data for luxurious apartments in the downtown waterfront area.
96) Refer to the above information to answer this question. What are the equilibrium
96) $\qquad$ values of price and quantity?
A) $\$ 1.6$ million and 18 .
B) $\$ 1.4$ million and 18 .
C) $\$ 1.8$ million and 18 .
D) $\$ 2.0$ million and 18 .
E) $\$ 1.2$ million and 18 .
97) Refer to the above information to answer this question. If the developer decides to set
97) $\qquad$ the price at $\$ 1.8$ million for each apartment, what is the quantity demanded?
A) 16 .
B) 15 .
C) 14 .
D) 18 .
E) 17 .
98) Refer to the above information to answer this question. If two potential buyers decide $\qquad$ to leave this market, what are the new equilibrium values of price and quantity?
A) $\$ 1.4$ million and 16 .
B) $\$ 1.6$ million and 14 .
C) $\$ 1.2$ million and 18 .
D) $\$ 2.0$ million and 10 .
E) $\$ 1.8$ million and 12 .


## Quantity per period

99) Refer to the above graph to answer this question. What could cause the movement
100) $\qquad$ from point A to point B ?
A) An increase in the price of a substitute product.
B) An increase in prices of resources.
C) An increase in the price.
D) An increase in the supply.
E) An increase in the price of a complementary product.
101) Refer to the above graph to answer this question. What could cause the movement from point B to point C ?
A) An increase in the price of a complementary product.
B) An increase in the demand.
C) A decrease in the price.
D) An increase in the price of a substitute product.
E) A decrease in prices of resources.
102) Refer to the above graph to answer this question. What could cause the movement from point C to point D ?
A) A decrease in prices of productive resources.
B) An increase in the price of a complementary product.
C) An increase in the price of a substitute product.
D) A decrease in the supply.
E) A decrease in the price.
103) Refer to the above graph to answer this question. What could cause the movement from point D to point A ?
A) An increase in the price of a substitute product.
B) A decrease in the demand.
C) An increase in prices of resources.
D) An increase in the price of a complementary product.
E) An increase in the price.
104) Refer to the above graph to answer this question. How could you describe the movement from point A to point B?
A) An increase in supply which leads to an increase in the equilibrium price and an increase in the quantity demanded.
B) An increase in supply which leads to an increase in the equilibrium price and an increase in demand.
C) An increase in demand which leads to an increase in supply and an increase in the equilibrium price.
D) An increase in demand which leads to a decrease in the equilibrium price and an increase in supply.
E) An increase in demand which leads to an increase in the equilibrium price and an increase in the quantity supplied.
105) Refer to the above graph to answer this question. How could you describe the movement from point B to point C ?
A) An increase in supply which leads to an increase in the equilibrium price and an increase in demand.
B) An increase in supply which leads to a decrease in the equilibrium price and an increase in the quantity demanded.
C) An increase in demand which leads to a decrease in the equilibrium price and a decrease in supply.
D) An increase in supply which leads to a decrease in the equilibrium price and an increase in demand.
E) An increase in demand which leads to a decrease in the equilibrium price and an increase in supply.
106) Refer to the above graph to answer this question. How could you describe the movement from point C to point D ?
A) A decrease in demand which leads to a decrease in the equilibrium price and a decrease in the quantity supplied.
B) A decrease in supply which leads to an increase in the equilibrium price and a decrease in demand.
C) A decrease in demand which leads to a decrease in the equilibrium price and a decrease in supply.
D) A decrease in demand which leads to an increase in the equilibrium price and a decrease in supply.
E) A decrease in supply which leads to a decrease in the equilibrium price and a decrease in the quantity demanded.
107) Refer to the above graph to answer this question. How could you describe the movement from point D to point A ?
A) A decrease in demand which leads to an increase in the equilibrium price and a decrease in supply.
B) A decrease in supply which leads to an increase in the equilibrium price and a decrease in demand.
C) A decrease in supply which leads to a decrease in the equilibrium price a decrease in demand.
D) A decrease in supply which leads to an increase in the equilibrium price and a decrease in quantity demanded.
E) A decrease in demand which leads to an increase in the equilibrium price and a decrease in the quantity supplied.

## 1. An increase in price;

2. A decrease in price;
3. No change in price;
A. An increase in the quantity traded;
B. A decrease in the quantity traded;
C. No change in quantity traded.
107) Refer to the above information to answer this question. What is the effect on an inferior product of a decrease in incomes?
A) 2 and
B) 2 and
C) 1 and
B.
D) 1 and
C. B. A.
E) 1 and
A.
108) $\qquad$
109) Refer to the above information to answer this question. What is the effect on a normal product of a decrease in incomes?
A) 1 and
B) 1 and
C) 1 and
A.
D) 2 and
B.
E) 2 andB.
A.
110) Refer to the above information to answer this question. What is the effect of consumers' expecting that the future price of a product will be lower?
A) 3 and
B) 2 and
C) 3 and
D) 1 and
B.
E) 1 and
A.
111) Refer to the above information to answer this question. What is the effect on product X of a decrease in the price of substitute product Y ?
A) 3 and
A.
B) 1 and
B.
B.
B.
C) 2 and
C.
D) 1 and
E) 3 and
112) Refer to the above information to answer this question. What is the effect on product X of a decrease in the price of complementary product Z ?
A) 2 and
B) 2 and
C) 1 and
A.
D) 1 and
B.
E) 3 and
C.
113) Refer to the above information to answer this question. What is the effect of a decrease in the price of productive resources?
A) 3 and
A.
A.
B) 1 and
B.
B.
C) 2 and
C.
D) 1 and
E) 2 and
114) Refer to the above information to answer this question. What is the effect of an improvement in technology?
A) 1 and
A.
A.
B) 3 and
B.
B.
C.
C) 3 and
D) 1 and
E) 2 and
115) Refer to the above information to answer this question. What is the effect of an $\qquad$ increase in business taxes?
A) 1 and
B .
B) 2 and
A .
C) 2 and
.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
,
$\qquad$
116) $\qquad$
B.
D) 1
E) 1

| $a$ | $a$ |
| :--- | :--- |
| $n$ | $n$ |
| $d$ | $d$ |

A C
115) Refer to the above information to answer this question. What is the effect of producers' expectations that future prices of a product will increase?
A) 2 and
A.
A.
A.
B) 1 and
B.
C) 3 and
C.
D) 1 and
E) 3 and
116) If the price of a product is above equilibrium, which of the following statements is true?
A) A shortage of the product exists.
B) The quantity supplied will exceed the quantity demanded.
C) The quantity demanded will exceed the quantity supplied.
D) None of the choices are correct.
117) If the price of a product is below equilibrium, which of the following statements is
116) $\qquad$
117) $\qquad$ true?
A) A surplus of the product exists.
B) The quantity supplied will exceed the quantity demanded.
C) The quantity demanded will exceed the quantity supplied.
D) None of the choices are correct.

118) Refer to the information above to answer this question. What is the effect if price is currently $\$ 5$ ?
A) The quantity traded is 80 .
B) There is a shortage of 20 .
C) There is a surplus of 20 .
D) The quantity supplied is 80
119) Refer to the information above to answer this question. Assume that there is a shortage of 40 units. What does this mean?
A) The quantity traded is 40 .
B) Price must be $\$ 8$.
C) Price will fall.
D) Buyers would be willing to pay an additional $\$ 4$ per unit for the quantity being traded.
120) Refer to the information above to answer this question. Assume that there is a surplus
119) $\qquad$
120) $\qquad$ of 20 units. What does this mean?
A) The quantity traded is 80 .
B) Price will rise.
C) Price must be $\$ 5$.
D) Buyers are only willing to pay $\$ 2$ less than the current price in order to buy all of the quantity supplied.
121) Refer to the information above to answer this question. Assume that the market was at equilibrium and that demand increases by 20 units. What will be the new equilibrium price and quantity?
A) Price will rise by $\$ 2$ and quantity traded will rise by 20 units.
B) Price will fall by $\$ 2$ and quantity traded will fall by 20 units.
C) Price will fall by $\$ 1$ and quantity traded will fall by 10 units.
D) Price will rise by $\$ 1$ and quantity traded will rise by 10 units.
122) What does the term "demand" refer to?
A) The quantity purchased at the equilibrium price.
B) The amounts that consumers are both willing and able to purchase at various prices.
C) The price consumers are willing to pay for a certain quantity of a product.
D) The amounts that consumers are either willing or able to purchase at various prices.
123) What will a surplus of a product lead to?
B) An increase in supply.
C) A reduction in supply.
D) An increase in price.
124) What is the effect on income if there is a decrease in the price of a product?
A) It will decrease demand.
B) It will have no effect on income.
C) It will increase consumers' actual income while leaving their real income unchanged.
D) It will increase consumers' real income while leaving their actual income unchanged.
125) What is the effect of an increase in the price of coffee?
A) It will lead to a decrease in the demand for tea.
$\qquad$
B) It will lead to an increase in the demand for tea.
C) It will have no effect on the tea market.
D) It will increase the demand for coffee.
126) What is the slope of the demand curve?
126)
A) It is downward-sloping because higher prices are associated with larger quantities.
B) It is upward-sloping because when the price of a product increases, consumers are willing and able to buy more.
C) It is downward-sloping because when the price of a product falls, consumers are willing and able to buy more.
D) It is upward-sloping because when the price of a product falls, consumers are willing and able to buy more.
127) What is the effect of an increase in the price of a resource?
A) It will cause an increase in the supply of the product.
B) It will cause a decrease in the demand for the product.
C) It will cause an increase in the demand for the product.
D) It will cause a decrease in the supply of the product.
128) In what way are Pepsi-Cola and Coca-Cola related?
A) They are complementary
B) They are unrelated products. products.
C) They are inferior products.
D) They are substitute products.
129) Which of the following could cause an increase in the supply of wheat?
A) A decrease in the price of oats.
B) Producers expect the price of wheat to increase.
C) An increase in the price of fertilizer.
D) An imposition of a sales tax on wheat.
130) All of the following, except one, would cause an increase in demand for a normal product. Which is the exception?
A) An increase in consumers' incomes.
B) An increase in the size of the market.
C) Consumer expectations of a lower future price for the product.
D) An increase in the price of a substitute product.
131) Which of the following pairs of goods are complementary?
A) Skis and ski boots.
B) Bread and crackers.
C) Coffee and tea.
D) Popcorn and pretzels.
132) All of the following, except one, would cause a decrease in the supply of product A. Which is the exception?
A) An increase in business taxes.
B) An increase in the price of resources used to make product A.
C) An improvement in technology.
D) The expectation by suppliers that future prices of product A will be higher.
133) Which of the following best describes a normal product?
A) A product that people both need and like.
B) A staple product that everyone needs.
C) A product whose demand increases if income decreases.
D) A product whose demand increases if income increases.
134) How will a change in income affect the demand for an inferior product?
134)
A) The demand will increase if the income of consumers increases.
B) The demand for an inferior product is not affected by consumer incomes.
C) The demand will increase if the income of consumers decreases.
D) The demand will remain the same but the quantity demanded will increase if income decreases.
135) Which of the following factors will shift the demand curve to the left?
A) An increase in income if the product is an inferior product.
B) The expectation that future prices of the product will be higher.
C) A decrease in the price of a complementary product.
D) An increase in the price of a substitute product.
136) A rightward shift in the supply curve for a product could be caused by all of the following except one. Which is the exception?
A) A technological improvement in manufacturing methods for the product
B) A decrease in the price of a productive resource used in its manufacture
C) The expectation of suppliers that the future price of the product will increase
D) A decrease in the price of a product that is a substitute in production
137) What is the effect of a decrease in the supply of a product?
A) It will cause a decrease in both the price and in the quantity traded.
B) It will cause an increase in both the price and the quantity traded.
C) It will cause an increase in the price but a decrease in the quantity traded.
D) It will cause a decrease in the price but an increase in the quantity traded.

Table 2.11 depicts the market for mushrooms (in thousands of kilograms per month).

## TABLE 2.11

$\begin{array}{llllllllllllll}\text { Price (\$) } & 2.50 & 3.00 & 3.50 & 4.00 & 4.50 & 5.00 & 5.50 & 6.00\end{array}$
Quantity
demanded $\begin{array}{lllllllll}64 & 62 & 60 & 58 & 56 & 54 & 52 & 50\end{array}$
Quantity
$\begin{array}{lllllllll}\text { supplied } & 40 & 44 & 48 & 52 & 56 & 60 & 64 & 68\end{array}$
138) Refer to Table 2.11 to answer this question. What are the values of equilibrium price $\qquad$ and quantity traded?
A) $\$ 3$ and 52 .
B) $\$ 4$ and 58 .
C) $\$ 3$ and 62 .
D) $\$ 4.50$ and 56 .
E) They cannot be determined from the data.
139) Refer to Table 2.11 to answer this question. What will happen if the price of the $\qquad$ product is $\$ 3$ ?
A) There would be a surplus of 18 , which would lead to an increase in price.
B) There would be a surplus of 18 , which would lead to a decrease in price.
C) There would be a shortage of 18 , which would lead to an increase in price.
D) There would be a shortage of 18 , which would lead to a decrease in price.
E) There would be neither a surplus nor a shortage.
140) In what way are products $A$ and $B$ related if an increase in the price of product $A$ leads to a decrease in the demand for product $B$ ?
A) The two products must be inferior products.
B) Consumer income has increased, and product A is an inferior product.
C) Consumer income has decreased, and product A is a normal product.
D) The two products must be substitutes.
E) The two products must be complements.
141) What is the effect of a shortage?
$\qquad$
$\qquad$
A) It will cause an increase in the price, leading to an increase in the quantity supplied and a decrease in the quantity demanded.
B) It will cause a decrease in the price, leading to an increase in the quantity supplied and a decrease in the quantity demanded.
C) It will cause an increase in the price, leading to a decrease in the quantity supplied and an increase in the quantity demanded.
D) It will cause a decrease in the price, leading to a decrease in the quantity supplied and an increase in the quantity demanded.
142) What is the effect of an increase in demand for a product?
A) Its price will fall and quantity traded will decrease.
B) Its price will rise and quantity traded will decrease.
C) Its price will rise and quantity traded will increase.
D) Its price will fall and quantity traded will increase.

## FIGURE 2.15


143) Refer to Figure 2.15 to answer this question. What will be the effect if the price is
143) $\qquad$ now \$1,200?
A) There would be a shortage of 30 .
B) There would be a surplus of 30 .
C) The price will increase.
D) 160 would be purchased.
E) There would be a surplus of 60 .
144) Refer to Figure 2.15 to answer this question. Assume that there is a shortage of 60 units. What does this mean?
A) The price must be $\$ 600$.
B) The price must be $\$ 1,200$.
C) The price must be $\$ 800$.
D) The price must be above equilibrium.
145) Refer to Figure 2.15 to answer this question. Suppose that initially the market was in equilibrium and that demand increased by 60 . What will be the new equilibrium as a result?
A) A price of $\$ 1,000$ and quantity traded of 120 .
B) A price of $\$ 1,000$ and quantity traded of 160 .
C) A price of $\$ 1,400$ and quantity traded of 240 .
D) A price of $\$ 1,400$ and quantity traded of 160 .
E) A price of $\$ 1,200$ and quantity traded of 160 .
146) How will the demand and supply of a product be affected if both producers and consumers expect the future price of a product will be higher than at present?
A) It will cause an increase in both the demand and supply.
B) It will cause an increase in demand but a decrease in supply.
C) It will cause an increase in supply but a decrease in demand.
D) It will cause an increase in supply but will have no effect on demand.
E) It will cause a decrease in both the demand and supply.
147) All else held constant, an increase in supply will lead to a
145)
144) $\qquad$
$\qquad$
146) $\qquad$
147) $\qquad$
A) increase in price and decrease in quantity demanded.
B) decrease in price and increase in quantity demanded.
C) decrease in price and decrease in quantity demanded.
D) increase in price and increase in quantity demanded.
148) All else held constant, a decrease in supply will lead to a
A) decrease in price and decrease in quantity demanded.
B) decrease in price and increase in quantity demanded.
C) increase in price and increase in quantity demanded.
D) increase in price and decrease in quantity demanded.
149) All else held constant, an increase in demand will lead to a
A) increase in price and increase in quantity supplied.
B) increase in price and decrease in quantity supplied.
C) decrease in price and increase in quantity supplied.
D) decrease in price and decrease in quantity supplied.
150) All else held constant, a decrease in demand will lead to a
A) decrease in price and decrease in quantity supplied.
B) decrease in price and increase in quantity supplied.
C) increase in price and decrease in quantity supplied.
D) increase in price and increase in quantity supplied.

The following table shows the quantity demanded and quantity supplied of grapefruits (in millions of kilos):

| Price per kilo <br> $\mathbf{( \$ )}$ | Quantity demanded <br> (in millions of kilos) | Quantity supplied <br> (in millions of kilos) |
| :---: | :---: | :---: |
| 1.75 | 40 | 16 |
| 2.00 | 38 | 20 |
| 2.25 | 36 | 24 |
| 2.50 | 34 | 28 |
| 2.75 | 32 | 32 |
| 3.00 | 30 | 36 |
| 3.25 | 28 | 40 |

151) Refer to the table above to answer this question. If the price of oranges (a substitute) $\qquad$ were to decrease, causing the demand for grapefruit to change by 12 million of kilos, what will be the new equilibrium price and quantity?
A) $\$ 3.25$ and 40 million kilos
B) $\$ 2.25$ and 48 million kilos
C) $\$ 2.25$ and 24 million kilos
D) $\$ 2.75$ and 44 million kilos
152) Refer to the table above to answer this question. If buyers think that the price of grapefruits is going to rise, causing the demand to change by 6 million kilos, what will be the new equilibrium price and quantity?
A) $\$ 2.50$ and 28 million kilos
B) $\$ 2.75$ and 26 million kilos
C) $\$ 3.00$ and 36 million kilos
D) $\$ 2.50$ and 26 million kilos
153) Refer to the table above to answer this question. If factor prices were to rise, causing
154) $\qquad$ the supply to change by 12 million kilos, what will be the new equilibrium price and quantity?
A) $\$ 2.25$ and 36 million kilos
B) $\$ 3.25$ and 28 million kilos
C) $\$ 2.75$ and 44 million kilos
D) $\$ 2.75$ and 20 million kilos

The following figure shows the market for grapefruit (in kilos):

154) Refer to the diagram above to answer this question. If the price of oranges (a substitute) were to decrease, causing the demand for grapefruit to change by 12 kilos, what will be the new equilibrium price and quantity?
A) $\$ 2.75$ and 44 kilos
B) $\$ 2.25$ and 24 kilos
C) $\$ 2.25$ and 48 kilos
D) $\$ 3.25$ and 40 kilos
155) Refer to the diagram above to answer this question. If buyers think that the price of $\qquad$ grapefruits is going to rise, causing the demand to change by 6 kilos, what will be the new equilibrium price and quantity?
A) $\$ 3.00$ and 36 kilos
B) $\$ 2.50$ and 26 kilos
C) $\$ 2.75$ and 26 kilos
D) $\$ 2.50$ and 28 kilos
156) Refer to the diagram above to answer this question. If factor prices were to rise, $\qquad$ causing the supply to change by 12 kilos, what will be the new equilibrium price and quantity?
A) $\$ 3.25$ and 28 kilos
B) $\$ 2.75$ and 44 kilos
C) $\$ 2.75$ and 20 kilos
D) $\$ 2.25$ and 36 kilos

TRUE/FALSE. Write ' $T$ ' if the statement is true and ' F ' if the statement is false.
157) The term "demand" means the quantities that people would like to purchase at various different prices.
158) A change in the price of a product has no effect on the demand for that same product.
$\qquad$
$\qquad$
159) An increase in the price of a product causes a decrease in the real income of consumers.
160) An increase in the price of a product leads to an increase in the supply.
161) Equilibrium price implies that everyone who would like to purchase a product is able to.
162) Surpluses drive prices up; shortages drive prices down.
163) An increase in incomes will lead to a decrease in the demand for an inferior product.
164) A decrease in the demand for a product will lead to a decrease in both the price and the quantity traded.
165) An increase in business taxes causes the supply curve to shift left.
166) A decrease in supply causes the price to fall and the quantity traded to increase.
160) $\qquad$
161) $\qquad$
162) $\qquad$
163) $\qquad$
$\qquad$
$\qquad$
$\qquad$


$\qquad$

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.
167) Briefly explain the five determinants of market demand.
168) What is the distinction between supply and quantity supplied?
169) Explain the difference between a normal product and an inferior product.
170) Explain how a market adjusts to an increase in the supply of a product.
171) Briefly explain the six determinants of market supply.
172) Stuff-Crust Pizza is a new pizza introduced by Pizza Hut. What happens to the equilibrium price and equilibrium quantity in each of the following situations?
a. Due to weather conditions, crop yields (including wheat) decreased.
b. The price of beer decreased
c. Dominos Pizza introduced a similar type of pizza that sold for $\$ 1$ less than the one by Pizza Hut.
d. A recession reduced households' income.
e. A new oven technology reduced the time it takes to bake a pizza.
173) Demonstrate graphically and explain verbally the difference between an
167) $\qquad$
168) $\qquad$
169) $\qquad$
170) $\qquad$
171) $\qquad$
172) $\qquad$
173) $\qquad$ increase in the quantity demanded and an increase in demand. Describe what might have caused each to occur.
174) Consider the following supply and demand diagram for Tootsie Rolls. Note that the market is currently in equilibrium, with a price of $\mathrm{P}^{*}$ and a quantity exchanged of $Q^{*}$.

Price res by describing what is happening to the demand side of the market. $\qquad$ (\$/bag) Roll as its official candy.
ate Lovers designates the Tootsie


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175) Suppose that the consumer side of the market for skateboards in New York is represented by the diagram below. The current price of skateboards is $P$.

A
Each of the events described below will have some impact on the demand for skateboards. For each event, draw a diagram to illustrate the effect of the event. Be sure to explain your diagrams using pertinent economic terminology ("movement along" or "shift in").

(a) A drop in the price of skateboards.
(b) A drop in the price of kneepads.
(c) A decline in income.
176) Demonstrate graphically and explain verbally the concept of a shortage. Is price above or below equilibrium?
177) Which of the following factors will lead to a decrease in the demand for apple
176) $\qquad$ juice (Apple juice is considered to be a normal good):
a) An increase in the price of apple juice.
b) An increase in the price of apples.
c) The expectation by consumers that the price of apple juice is likely to decrease.
d) A decrease in consumers' average income.
e) An increase in the price of orange juice.
178) The following table shows the market demand and supply for Gala apples in Red Deer.

|  |  |  |
| :---: | :---: | :---: |
| 0 | 250 | 90 |
| 1 | 220 | 100 |
| 2 | 190 | 110 |
| 3 | 160 | 120 |
| 4 | 130 | 130 |
| 5 | 100 | 140 |
| 6 | 70 | 150 |

$\qquad$
a)

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c)

Afte
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179) Consider the effects of each event outlined in the following table on the $\qquad$ market for orange juice in Canada. Place a $(\uparrow),(\downarrow)$ or $(-)$ under the appropriate heading to indicate whether there will be an increase, decrease, or no change in demand (D), supply (S), equilibrium price (P) and quantity traded (Q). Assume orange juice is a normal good.

| Event | D | S | P | Q |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| a) Medical research indicates that orange juice can |  |  |  |  |
| cure baldness. |  |  |  |  |
| b) There is a significant increase in the price of |  |  |  |  |
| oranges. |  |  |  |  |
| c) An increase in income taxes reduces the after- |  |  |  |  |
| tax income of Canadians. |  |  |  |  |
| d) An improved method of juicing is introduced in |  |  |  |  |
| the industry. |  |  |  |  |
| e) The price of apple juice increases dramatically. |  |  |  |  |

180) In Agfa, at a market price of $\$ 3$ per kilo, there is a shortage of 60 kilos of basmati rice. For each 50 -cent increase in the price, the quantity demanded drops by 8 kilos, while the quantity supplied increases by 12 kilos.
a) What will be the equilibrium price?
b) What will be the surplus/shortage at a price of $\$ 5.50$ ?
181) The two graphs below show the markets for orange juice and apple juice, which are initially in equilibrium:

## Orange Juice


180) $\qquad$

## Apple Juice



Show what will happen to the prices and quantities traded of both products if
182) Explain how a surplus will be eliminated.
183) Explain how a shortage will be eliminated.
184) Assume that the market for jeans is initially in equilibrium.
a) Draw a demand and supply diagram to illustrate the initial equilibrium.
b) Explain the impact on the market for jeans if consumers expect the future price for jeans to increase.
c) Graphically illustrate the impact on the diagram you prepared for part (a).
185) Assume the market for apple pie is initially in equilibrium.
a) Draw a demand and supply diagram to illustrate the initial equilibrium.
b) Explain the impact on the apple pie market if there is an increase in the price of vanilla ice cream.
c) Graphically illustrate the impact on the diagram you prepared for part (a).
186) Assume the market for coffee is initially in equilibrium.
a) Draw a demand and supply diagram to illustrate the initial equilibrium.
b) Explain the impact on the coffee market if there is an increase in the price of coffee beans.
c) Graphically illustrate the impact on the diagram you prepared for part (a).
187) Assume the market for coffee is initially in equilibrium.
a) Draw a demand and supply diagram to illustrate the initial equilibrium.
b) Explain the impact on the coffee market if there is a decrease in business taxes.
c) Graphically illustrate the impact on the diagram you prepared for part (a).
188) Why is the demand curve downward sloping? Explain.
189) Define demand.
190) Explain the effects of a decrease in demand.
191) What effects will the following changes have on the price and quantity traded of computers?
a) General population increases
b) New and better technology for producing computers is introduced
c) Income of the population increases
d) Wage for computer workers increase
192) Distinguish between a demand curve and demand schedule.
193) Distinguish between demand and quantity demanded.
194) Distinguish between the substitution effect and substitute products.
195) If the price of gasoline goes up, then the demand will go down. Evaluate this statement.
$\qquad$
183) $\qquad$
184) $\qquad$
185) $\qquad$
186) $\qquad$
187) $\qquad$
188) $\qquad$
189) $\qquad$
190) $\qquad$
191) $\qquad$
192) $\qquad$
193) $\qquad$
194) $\qquad$
195) $\qquad$
196) Assuming apple juice is a normal good, which of the following factors will $\qquad$ increase the demand for apple juice?
a) An increase in the price of apples.
b) An increase in the price of apple juice.
c) An increase in the price of orange juice.
d) An increase in consumer income.
e) An increase in the number of apple juice suppliers.
197) Which of the following factors will change the supply of apple juice?
197) $\qquad$
a) An increase in the price of apples.
b) An increase in the price of apple juice.
c) An increase in the price of orange juice.
d) An increase in consumer income.
e) An increase in the number of apple juice suppliers.
198) The following table shows the demand and supply of bottles of premium olive oil for Country ABC.

| Price (\$) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Quantity demanded | 18 | 16 | 14 | 12 | 10 | 8 | 6 |
| Quantity supplied | 3 | 6 | 9 | 12 | 15 | 15 | 21 |

a) What are values of equilibrium price and quantity?
b) Suppose the price of premium olive oil is $\$ 6$ per bottle, would there be a shortage or surplus? How much?
199) "If the price of pineapples changes, demand will also change." Evaluate this statement.

1) $B$
2) $E$
3) E
4) C
5) B
6) A
7) $A$
8) $B$
9) $D$
10) D
11) B
12) B
13) D
14) B
15) E
16) $A$
17) D
18) C
19) C
20) B
21) $A$
22) A
23) B
24) A
25) D
26) C
27) E
28) A
29) B
30) A
31) C
32) A
33) A
34) A
35) B
36) D
37) C
38) A
39) B
40) D
41) D
42) A
43) D
44) E
45) D
46) D
47) C
48) A
49) A
50) D
51) A
52) D
53) D
54) B
55) B
56) C
57) B
58) B
59) B
60) C
61) D
62) E
63) E
64) B
65) A
66) E
67) D
68) A
69) B
70) B
71) A
72) E
73) E
74) D
75) C
76) C
77) B
78) A
79) A
80) B
81) C
82) B
83) C
84) B
85) E
86) C
87) C
88) E
89) B
90) E
91) D
92) E
93) B
94) C
95) C
96) B
97) C
98) C
99) A
100) E
101) B
102) C
103) E
104) B
105) A
106) D
107) E
108) D
109) $B$
110) C
111) C
112) $C$
113) E
114) $A$
115) $D$
116) B
117) C
118) $B$
119) $D$
120) D
121) $D$
122) B
123) A
124) D
125) B
126) C
127) D
128) D
129) $A$
130) C
131) A
132) C
133) D
134) C
135) A
136) C
137) C
138) D
139) C
140) E
141) A
142) $C$
143) E
144) C
145) E
146) B
147) B
148) $D$
149) A
150) A
151) C
152) C
153) В
154) B
155) A
156) A
157) FALSE
158) TRUE
159) TRUE
160) FALSE
161) FALSE
162) FALSE
163) TRUE
164) TRUE
165) TRUE
166) FALSE
167) The first determinant of market demand is consumer preferences, i.e. the tastes and fashions of consumer. The second is consumer incomes. For a normal product, higher incomes leads to a higher demand; on the other hand, for an inferior product higher incomes lead to a lower demand. The third determinant is the prices of related products, which include substitute products, and complementary products. The demand will be higher if the price of a substitute increases or the price of a complement decreases. The fourth determinant is expectations of the future. The demand will increase if future prices or incomes are expected to be higher or a future shortage is anticipated. The final determinant is the population. The market demand for a product may be affected if there is a change in the size, income, or age distribution of the population.
168) Supply refers to the whole range of quantities that are supplied at various prices as depicted by a supply schedule or supply curve. The quantity supplied refers to a particular quantity at a particular price, i.e., a point on a supply curve.
169) A normal product is one in which the demand increases as incomes increase (there is a direct relationship between them); an inferior product is one in which the demand decreases when incomes increase (there is an inverse relationship between them).
170) An increase in the supply of a product will initially lead to a surplus. As a result competition among the sellers will cause the price to decrease. The effect of a decrease in the price will be an increase in the quantity demanded and a decrease in the quantity supplied. Both factors will help to eliminate the surplus. Eventually the price will be lower and the quantity traded will be higher than initially.
171) The first determinant of supply is the prices of resources. Lower prices will cause costs of production to fall leading to an increase in supply. Secondly, a drop in business taxes will also decrease costs and increase supply. The third determinant is technological change. An improved method of production also lowers costs and increases supply. The fourth determinant is the prices of substitutes in production. If the price of a productively related product were to fall it would cause an increase in the supply of the other product. Fifthly, supply will increase if producers believe that future prices of the product will be lower. The final determinant of supply is the number of suppliers; the greater the number of suppliers, the higher will be the supply.
172) a. A reduction in the supply of wheat raises its price. Since wheat is used to make pizza dough, the cost of producing a unit of pizza rises. The supply curve for pizza shifts to the left, the equilibrium price rises, and the equilibrium quantity decreases.
b. To many people, beer and pizza are complementary goods. A decrease in the price of beer increase the quantity of beer demanded, and shifts the demand curve for pizza to the right. As a result, the equilibrium price of pizza rises, as does the equilibrium quantity.
c. If households perceive the two pizzas as substitutes, the quantity demanded for Domino Pizza's pizza rises. This decreases the demand for Pizza Hut's pizza, which lowers its equilibrium price and equilibrium quantity. The size of the shift depends on brand loyalty.
d. It's reasonable to assume that Stuff-Crust Pizza is a normal good. Thus, a reduction in consumers' income lowers the demand for pizza, which decreases both the equilibrium price and equilibrium quantity of pizza. Note here that the exact opposite happens if pizza is an inferior good.
e. The new technology lowers the cost of producing a unit of pizza. The supply curve shifts to the
ht, equilibrium quantity rises, and equilibrium price decreases.
173) An increase in the quantity demanded refers to moving downward along a demand curve as illustrated by the movement from point A to point B in the diagram below. This movement is caused by a decrease in the price of the item being demanded.


An increase in demand refers to a rightward shift of the entire demand curve (from D to D ) as $0 \quad 1$ illustrated by the movement from point A to point B in the diagram below. This movement is the result of a change in one of the 5 determinants of change in demand, such as a rise in income, a drop in the price of a complement, rise in the price of a substitute, a change in taste toward the product, an increase in future expectations of a higher price or income, or an increase in the size of the market.


Quantity demanded (per unit of time)
174) (a) The diagram:


The designation of Tootsie Rolls as the official candy of The American Association of Chocolate Lovers results in more people buying Tootsie Rolls. This is an increase in demand, shown in the diagram as a shift of the demand curve to the right from D to $\mathrm{D}^{\prime}$.
(b) The diagram:

PricBy computerizing their manufacturiyg plant, the Tootsie Roll Company can make more Tootsie Rolls ( $\$ / b$ per hour, increasing the productiyity of their plant. This increase in productivity means that any given output levelcosts less to prodyce, so the Tootsie Roll Company can charge a lower price than before and still maintain its previops profit leyels. This results in an increase in supply; shown as a shift of the supply curve to the rightfrom $S$ to $S \%$. From the demand side of the market, it results in a lower price and an. increase in the quantity demanded. This is shown by the movement downward along the


Quantity
(1000s of bags)
175) (a) The diagram:


A drop in the price of skateboards, say from PA to PB, results in a movement downward along the demand curve, such as shown above from $A$ to $B$, resulting in more skateboards being purchased (QA to QB). Using economic terminology, this change is referred to as an increase in the quantity demanded.
(b) The diagram:
arders wear kneepads. Consequently, when the price of kneepads drops, skateboarding will become Prickore affordable; resulting in more skateboards being purchased at each price. In the picture of the demand for skateboards, this is illustrated by a shift to the right of the demand curve for skateboards, from $D$ to $\mathrm{D}^{\prime}$. Athe original price P , there is a movement from point A on demand D to point B on


Price
(\$/board)
176) A shortage refers to situations where the quantity demanded is greater than the quantity supplied. This is illustrated in the diagram below. At price $P$ the quantity demanded $(\mathrm{Q})$ is greater than the


## Quantity (per unit of time)

177) c
178) a) Price: \$4; quantity traded: 130 .
b) Price: $\$ 2$; quantity traded: 190.
c) Surplus of 40 .
179) 

|  | D | $\mathbf{S}$ | $\mathbf{P}$ | $\mathbf{Q}$ |
| :--- | :---: | :---: | :---: | :---: |
| a) | $\uparrow$ | - | $\uparrow$ | $\uparrow$ |
| b) | - | $\downarrow$ | $\uparrow$ | $\downarrow$ |
| c) | $\downarrow$ | - | $\downarrow$ | $\downarrow$ |
| d) | - | $\uparrow$ | $\downarrow$ | $\uparrow$ |
| e) | $\uparrow$ | - | $\uparrow$ | $\uparrow$ |

180) a) $\$ 4.50$
b) Surplus of 40 kilos.
181) 



Q2 Q1
Quantity per period


Q1 Q2
Quantity per period
182) A surplus occurs when the quantity demanded is less than the quantity supplied. A price decrease will eliminate a surplus. A price decrease will increase the quantity demanded and decrease the quantity supplied. The price will continue to decrease until the quantity demanded is equal to the quantity supplied.
183) A shortage occurs when the quantity demanded is greater than the quantity supplied. A price increase will eliminate a shortage. A price increase will decrease the quantity demanded and increase the quantity supplied. The price will continue to increase until the quantity demanded is equal to the quantity supplied.
184) a)

b) An increase in the future expected price of jeans by consumers will increase the demand curve to the right. The price and quantity traded will increase.
c)

185) a)

b) Assuming vanilla ice cream and apple pie are complementary goods, an increase in the price of vanilla ice cream will decrease the demand for apple pie. The price and quantity traded will decrease. c)

186) a)

b) An increase in the price of coffee beans will decrease the supply of coffee. Coffee beans are an input for coffee. The price will increase and quantity traded will decrease.
c)

187) a)

b) A decrease in business taxes will increase the supply for coffee. The price will decrease and quantity traded will increase.
c)

188) The demand curve is downward sloping because people tend to buy more at lower prices than at higher prices. For a given change in price, this will change the consumer's real income therefore affecting their ability to purchase. This is the income effect. A price change of a product will affect the consumers' willingness to purchase it. This is the substitution effect.
189) Demand refers to the quantities that consumers are willing and able to buy per period of time at various prices.
190) A decrease in demand will lead to a surplus and result in price and quantity traded to fall. Prices will continue to decrease until the surplus is eliminated and a new equilibrium quantity demanded and quantity supplied is reached.
191) a) Price and quantity traded increase
b) Price decreases and quantity traded increases
c) Price and quantity traded increase
d ) Price increases and quantity traded decreases
192) Demand curve is a graphical illustration of the relationship between price and quantity demanded. Demand schedule is a table that shows the relationship between price and quantity demanded.
193) Demand refers to the whole range of quantities that are demanded at various prices as depicted by a demand curve. The quantity demanded refers to a particular quantity demanded at a particular price, i.e., a point on a demand curve.
194) The substitution effect is the substitution of one product for another as a result of a change in their relative prices. Substitute products are products whose demands vary directly with a change in the price of similar products.
195) All else held constant, if the price of gasoline goes up there will be a decrease in the quantity demanded of gasoline. Demand does not change.
196) Assuming apple juice is a normal good; (c) and (d) will increase the demand for apple juice.
197) (a) An increase in the price of apples will decrease the supply and (e) an increase in the number of apple juice suppliers will increase the supply.
198) a) Equilibrium price is $\$ 4$ and equilibrium quantity is 12 bottles b) If the price is $\$ 6$ per bottle there will be a surplus of 7 bottles.
199) If the price of pineapple changes; neither the demand nor supply of pineapples will change. However, a change in price will affect the quantity demanded and quantity supplied.

