## Student name:

$\qquad$

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

1) In a competitive market, the market demand is $Q^{d}=60-6 P$ and the market supply is $Q^{s}$ $=4 \mathrm{P}$. A price ceiling of $\$ 3$ will result in a
A) shortage of 30 units.
B) shortage of 15 units.
C) surplus of 30 units.
D) surplus of 12 units.
2) In a competitive market, the market demand is $Q^{d}=60-6 \mathrm{P}$ and the market supply is $\mathrm{Q}^{\mathrm{s}}$ $=4 \mathrm{P}$. The full economic price under a price ceiling of $\$ 3$ is
A) 6 .
B) 7 .
C) 8.
D) 9 .
3) The buyer side of the market is known as the
A) income side.
B) demand side.
C) supply side.
D) seller side.
4) The law of demand states that, holding all else constant
A) as price falls, demand will fall also.
B) as price rises, demand will also rise.
C) price has no effect on quantity demanded.
D) as price falls, quantity demanded rises.
5) Which of the following would not shift the demand for good $A$ ?
A) drop in price of good A
B) drop in price of good B
C) consumer income
D) change in the level of advertising of good A
6) Changes in the price of good A lead to a change in
A) demand of good A.
B) supply of good B.
C) the quantity demanded of good A .
D) the quantity demanded of good $B$.
7) A change in income will not lead to
A) a movement along the demand curve.
B) a leftward shift of the demand curve.
C) a rightward shift of the demand curve.
D) a determinable shift in the demand curve as there is insufficient information.
8) If good A is an inferior good, an increase in income leads to
A) a decrease in the demand for good B.
B) a decrease in the demand for good A .
C) an increase in the demand for good A.
D) no change in the quantity demanded of good A .
9) Which of the following is probably not a normal good?
A) designer dresses
B) lobster
C) ramen noodles
D) expensive automobiles
10) An increase in the price of steak will probably lead to
A) an increase in demand for chicken.
B) an increase in demand for steak.
C) no change in the demand for steak or chicken.
D) an increase in the supply for chicken.
11) Which of the following pairs of goods are probably complements?
A) televisions and roller skates
B) frozen yogurt and ice cream
C) steak and chicken
D) hamburgers and hamburger buns
12) If $A$ and $B$ are complements, an increase in the price of good $A$ would
A) have no effect on the quantity demanded of B .
B) lead to an increase in demand for B.
C) lead to a decrease in demand for B.
D) not lead to an effect on the quantity demanded of B nor an increase or decrease in the demand for B .
13) Graphically, a decrease in advertising will cause the demand curve to
A) become steeper.
B) shift rightward.
C) become flatter.
D) shift leftward.
14) Persuasive advertising influences demand by
A) providing information about the availability of a product.
B) offering reduced prices for the product.
C) altering the underlying tastes of consumers.
D) none of the aforementioned approaches.
15) Which of the following can explain an increase in the demand for housing (a normal good)?
A) a drop in housing prices
B) an increase in the population
C) a decrease in income
D) an improvement in technology
16) The demand function recognizes that the quantity of a good consumed depends on
A) the prices of other goods only.
B) price and supply shifters.
C) demand shifters and price.
D) demand shifters only.
17) Suppose the demand for good $X$ is given by $Q^{d}{ }_{x}=10+a_{x} P_{x}+a_{y} P_{y}+a_{m} M$. From the law of demand, we know that $a_{x}$ will be
A) less than zero.
B) greater than zero.
C) zero.
D) zero or less than or greater than zero.
18) Suppose the demand for good $X$ is given by $Q^{d}{ }_{x}=10+a_{x} P_{x}+a_{y} P_{y}+a_{M} M$. If $a_{y}$ is positive, then
A) goods $y$ and $x$ are complements.
B) goods $y$ and $x$ are inferior goods.
C) goods y and x are normal goods.
D) goods y and x are substitutes.
19) Suppose the demand for good $X$ is given by $Q^{d}{ }_{x}=10+a_{x} P_{x}+a_{y} P_{y}+a_{M} M$. If $a_{M}$ is negative, then good $y$ is
A) a normal good.
B) an inferior good.
C) a complement.
D) a substitute.
20) Suppose the demand for good $X$ is given by $Q^{d}{ }_{x}=10-2 P_{x}+P_{y}+M$. The price of good X is $\$ 1$, the price of good Y is $\$ 10$, and income is $\$ 100$. Given these prices and income, how much of good X will be purchased?
A) 115
B) 515
C) 1,000
D) None of the statements associated with this question are correct.
21) Other things being held constant, the greater the price of a good
A) the higher the quantity demanded.
B) the greater the consumer surplus.
C) the lower the consumer surplus.
D) the higher the consumer surplus.
22) The curve that summarizes the total quantity producers are willing and able to produce at differing prices is the
A) market demand curve.
B) consumer surplus curve.
C) average cost curve.
D) market supply curve.
23) The law of supply states that, holding all else constant, as the price of a good falls,
A) quantity demanded rises.
B) quantity supplied falls.
C) quantity supplied rises.
D) quantity demanded falls.
24) The economic principle that producers are willing to produce more output when price is high is depicted by the
A) upward slope of the supply curve.
B) extreme steepness of the supply curve.
C) downward slope of the supply curve.
D) interaction of the supply and demand curves.
25) For a steel factory, a decrease in the cost of electricity to the plant will cause the supply curve to
A) become flatter.
B) shift to the left.
C) shift to the right.
D) become parallel to the price axis.
26) Changes in the price of a good lead to
A) changes in the quantity supplied of the good.
B) changes in supply.
C) changes in demand.
D) no effects in quantity supplied or demanded.
27) Technological advances will cause the supply curve to
A) shift to the left.
B) shift to the right.
C) become flatter.
D) become steeper.
28) An ad valorem tax causes the supply curve to
A) shift to the right.
B) become flatter.
C) become steeper.
D) shift to the left.
29) Suppose the supply of good $X$ is given by $Q_{x}^{S}=10+2 P_{x}$. How many units of good $X$ are produced if the price of good X is 20 ?
A) 10
B) 20
C) 30
D) 50
30) If a shortage exists in a market, the natural tendency is for
A) demand to increase.
B) price to increase.
C) quantity supplied to decrease.
D) no change in the market.
31) Suppose market demand and supply are given by $Q^{d}=100-2 P$ and $Q^{S}=5+3 P$. The equilibrium price is
A) $\$ 15$.
B) $\$ 19$.
C) $\$ 17$.
D) $\$ 20$.
32) Suppose market demand and supply are given by $Q^{d}=100-2 P$ and $Q^{S}=5+3 P$. The equilibrium quantity is
A) 92 .
B) 81 .
C) 45 .
D) 62 .
33) The maximum legal price that can be charged in a market is
A) a price floor.
B) an ad valorem tax.
C) the market equilibrium price.
D) a price ceiling.
34) Suppose market demand and supply are given by $Q^{d}=100-2 P$ and $Q^{S}=5+3 P$. If a price ceiling of $\$ 15$ is imposed,
A) there will be a surplus of 40 units.
B) there will be neither a surplus nor a shortage.
C) there will be a shortage of 40 units.
D) there will be a shortage of 20 units.
35) Suppose market demand and supply are given by $Q^{d}=100-2 P$ and $Q^{S}=5+3 P$. If a price ceiling of $\$ 15$ is imposed, what will be the resulting full economic price?
A) $\$ 19$
B) $\$ 21$
C) $\$ 6$
D) $\$ 25$
36) The minimum legal price that can be charged in a market is
A) a price floor.
B) a price ceiling.
C) nonpecuniary price.
D) full economic price.
37) Suppose market demand and supply are given by $Q^{d}=100-2 P$ and $Q^{S}=5+3 P$. If a price floor of $\$ 30$ is set, what will be size of the resulting surplus?
A) 0
B) 45
C) 30
D) 55
38) Suppose market demand and supply are given by $Q^{d}=100-2 P$ and $Q^{S}=5+3 P$. If the government sets a price floor of $\$ 30$ and agrees to purchase all surplus at $\$ 30$ per unit, the total cost to the government will be
A) $\$ 1,650$.
B) $\$ 1,375$.
C) $\$ 900$.
D) $\$ 1,125$.
39) If steak is a normal good, what do you suppose would happen to price and quantity during an economic recession?
A) Price would increase and quantity decrease.
B) Price and quantity would both increase.
C) Price and quantity would both decrease.
D) Price would decrease and quantity increase.
40) Suppose you produce wooden desks, and government legislation protecting the spotted owl has made it more expensive for you to purchase wood. What do you expect to happen to the equilibrium price and quantity of wooden desks?
A) Price and quantity will increase.
B) Price will increase but quantity will decrease.
C) Price and quantity will decrease.
D) Price will decrease but quantity will increase.
41) Suppose that supply increases and demand decreases. What effect will this have on price and quantity?
A) Price will increase, and quantity may rise or fall.
B) Price will decrease, and quantity will increase.
C) Price will decrease, and quantity will decrease.
D) Price will decrease, and quantity change is ambiguous.
42) Suppose both supply and demand decrease. What effect will this have on price?
A) It will fall.
B) It will rise.
C) It may rise or fall.
D) It will remain the same.
43) The law of demand states that if the price of a good falls and all other things remain the same, the
A) quantity demanded of the good falls.
B) quantity demanded of the good rises.
C) demand of the good rises.
D) demand for good falls.
44) Demand shifters do not include
A) the price of the good.
B) the consumer's income.
C) the level of advertising.
D) the price of the other goods.
45) Changes in the price of other goods lead to
A) a change in quantity demanded.
B) a change in demand.
C) no change in the demand curve.
D) a movement along the demand curve.
46) Good $X$ is a normal good if an increase in income leads to
A) an increase in the supply for good X .
B) an increase in the demand for good X .
C) a decrease in the demand for good X .
D) a decrease in the supply for good X .
47) Which of the following is least likely to be a normal good?
A) steak
B) airline travel
C) ramen noodles
D) a house
48) Suppose good X is a normal good. Then a decrease in income would lead to
A) an outward shift of the demand curve.
B) an inward shift of the demand curve.
C) no shift of the demand curve.
D) a movement along the demand curve.
49) An inferior good is a good
A) that has low quality.
B) that consumers purchase less of when their incomes are higher.
C) that consumers purchase more when their incomes are higher.
D) of high quality.
50) Suppose that good $X$ is a substitute for good $Y$. Then an increase in the price of good $Y$ leads to
A) an increase in the demand of good X .
B) a decrease in the demand of good $X$.
C) a decrease in the supply of good X .
D) an increase in the supply of good X .
51) Which of the following are least likely to be substitutes?
A) chicken and beef
B) cars and trucks
C) automobile and housing
D) automobile and gasoline
52) Good $Y$ is a complement to good $X$ if an increase in the price of good $Y$ leads to
A) an increase in the demand for good X .
B) an increase in the supply for good X .
C) a decrease in the demand for good X .
D) a decrease in the supply for good X .
53) Which of the following are least likely to be complements?
A) peanut butter and jelly
B) bread and butter
C) sports coats and dress slacks
D) cars and trucks
54) Firms advertise in order to cause the demand for their products to
A) shift to the right.
B) shift to the left.
C) remain unchanged.
D) shift to the right, left, or remain unchanged.
55) Advertising provides consumers with information about the underlying existence or quality of a product. These types of advertising messages are called
A) persuasive advertising.
B) informative advertising.
C) green advertising.
D) influential advertising.
56) Advertising can influence demand by altering tastes of consumers. This type of advertising is known as
A) persuasive advertising.
B) informative advertising.
C) strategic advertising.
D) influential advertising.
57) Which of the following statements is incorrect?
A) As the population rises, the market demand curve shifts to the right.
B) As a greater fraction of the population becomes elderly, the demand for medical services will tend to increase.
C) Changes in the composition of the population affect the demand for a product.
D) As the population increases, supply increases.
58) If consumers expect future prices to be higher,
A) they substitute current purchases for future purchases of perishable products.
B) stockpiling will happen when the products are durable in nature.
C) the position of the demand will not change.
D) the demand for automobiles today will not change.
59) The demand function
A) describes how much of good X will be purchased at the alternative price of good X , given all the other variables being constant.
B) recognizes that the quantity of a good consumed depends on its price and demand shifters.
C) shows the relationship between the quantity demanded of $X$ and variables other than its price.
D) does not include expectations.
60) Which of the following is a linear demand function?
A) $Q x^{d}=\alpha_{0}+\alpha_{x} \mathrm{P}_{\mathrm{x}}+\alpha_{\mathrm{y}} \mathrm{P}_{\mathrm{Y}}+\alpha_{\mathrm{M}} \mathrm{M}+\alpha_{\mathrm{H}} \mathrm{H}$.
B) $Q_{x}{ }^{d}=\alpha P_{x}{ }^{\alpha X} P_{Y}{ }^{\alpha Y} M^{\alpha M} H^{\alpha H}$.

D) $Q x^{d}=\alpha+\alpha \times \log P x+\alpha$ y $\log P Y+\alpha м \log M+\alpha$ м $\log H$.
61) Good $X$ is a normal good and its demand is given by $Q_{X}{ }^{d}=\alpha_{0}+\alpha_{X} P_{X}+\alpha_{Y} P_{Y}+\alpha_{M} M+$ $\alpha_{\mathrm{H}} \mathrm{H}$. Then we know that
A) $\alpha_{H}>0$.
B) $\alpha x>0$.
C) $\alpha_{\mathrm{Y}}>0$.
D) $\alpha{ }_{\mathrm{M}}>0$.
62) Suppose $X$ and $Y$ are complements and demand for $X$ is $Q_{X}{ }^{d}=\alpha_{0}+\alpha_{X} P_{X}+\alpha_{Y} P_{Y}+\alpha_{M} M$ $+\alpha_{\mathrm{H}} \mathrm{H}$. Then we know
A) $\alpha_{H}>0$.
B) $\alpha x>0$.
C) $\alpha_{Y}<0$.
D) $\alpha_{\mathrm{M}}<0$.
63) Suppose the demand for $X$ is given by $Q_{x}{ }^{d}=100-2 P_{X}+4 P_{Y}+10 M+2 A$, where $P_{X}$ represents the price of $\operatorname{good} \mathrm{X}, \mathrm{P}_{\mathrm{Y}}$ is the price of $\operatorname{good} \mathrm{Y}, \mathrm{M}$ is income, and A is the amount of advertising on good X . Based on this information, we know that good Y is
A) a substitute for good X .
B) a complement for good X .
C) an inferior good.
D) a normal good.
64) Suppose the demand for $X$ is given by $Q_{X}{ }^{d}=100-2 P_{X}+4 P_{Y}+10 \mathrm{M}+2 \mathrm{~A}$, where $\mathrm{P}_{\mathrm{X}}$ represents the price of $\operatorname{good} \mathrm{X}, \mathrm{P}_{\mathrm{Y}}$ is the price of $\operatorname{good} \mathrm{Y}, \mathrm{M}$ is income, and A is the amount of advertising on good X . Based on this information, we know that good X is a
A) substitute for good Y and a normal good.
B) complement for good Y and an inferior good.
C) complement for good Y and a normal good.
D) substitute for good Y and an inferior good.
65) Suppose the demand for $X$ is given by $Q_{x}{ }^{d}=100-2 P_{X}+4 P_{Y}+10 M+2 A$, where $P_{X}$ represents the price of good $\mathrm{X}, \mathrm{P}_{\mathrm{Y}}$ is the price of good $\mathrm{Y}, \mathrm{M}$ is income, and A is the amount of advertising on good X . If advertising on good X increases by $\$ 10,000$, then the demand for X will
A) decrease by 20,000 .
B) decrease by 100,000 .
C) increase by 100,000 .
D) increase by 20,000 .
66) Suppose the demand for $X$ is given by $Q_{X}{ }^{d}=100-2 P_{X}+4 P_{Y}+10 M+2 A$, where $P_{X}$ represents the price of $\operatorname{good} \mathrm{X}, \mathrm{P}_{\mathrm{Y}}$ is the price of $\operatorname{good} \mathrm{Y}, \mathrm{M}$ is income, and A is the amount of advertising on good X . Good X is
A) an inferior good.
B) a normal good.
C) a Giffen good.
D) a complement.
67) Consumer surplus is
A) the value consumers get from a supplier.
B) the value consumers do not pay because of a discount by supplier.
C) the value consumers get from a good but do not pay for.
D) equal to the amount consumers pay for a good.
68) If the price of good $X$ becomes lower, then the level of consumer surplus becomes
A) lower.
B) higher.
C) unchanged.
D) lower in the short run but higher in the long run.
69) The market supply curve indicates the total quantity all producers in a competitive market would produce at each price,
A) holding only input price fixed.
B) allowing input price to vary.
C) holding all supply shifters fixed.
D) allowing all supply shifters to vary.
70) Which of the following is not a supply shifter?
A) level of technology
B) prices of inputs
C) average income level
D) weather
71) If the price of an input rises, producers are willing to produce
A) more output at each given price.
B) less output at each given price.
C) the same output at each given price.
D) an indeterminable output as there is not enough information.
72) As additional firms enter an industry, the market supply curve
A) shifts to the right.
B) shifts to the left.
C) remains the same.
D) shifts in an indeterminable direction as a result of insufficient information.
73) An excise tax shifts the supply curve
A) down by the amount of the tax.
B) up by the amount of the tax.
C) by rotating it counterclockwise.
D) by rotating it clockwise.
74) An ad valorem tax shifts the supply curve
A) down by the amount of the tax.
B) up by the amount of the tax.
C) by rotating it counterclockwise.
D) by rotating it clockwise.
75) If firms expect prices to be higher in the future and the product is not perishable, then
A) the current supply curve shifts to the left.
B) the current supply curve shifts to the right.
C) producers produce more output to hold back for the future.
D) an indeterminable supply curve will result as there is not enough information..
76) The supply function
A) describes how much of good X will be produced at an alternative price of good X , given all the other variables are being held constant.
B) recognizes that the quantity of a good produced depends on its price and supply shifters.
C) shows the relationship between the quantity supplied of X and variables other than its price.
D) does not include technology.
77) The supply function for good $X$ is given by $Q_{X}{ }^{s}=1,000+P_{X}-5 P_{Y}-2 P_{w}$, where $P_{X}$ is the price of $\mathrm{X}, \mathrm{P}_{\mathrm{Y}}$ is the price of $\operatorname{good} \mathrm{Y}$, and $\mathrm{P}_{\mathrm{W}}$ is the price of input W . If the price of input W increases by $\$ 10$, then the supply of good X
A) will increase by 10 units.
B) will decrease by 20 units.
C) will decrease by 10 units.
D) will change by an indeterminable amount as there is not enough information.
78) The supply function for good $X$ is given by $Q_{X}{ }^{s}=1,000+P_{X}-5 P_{Y}-2 P_{W}$, where $P_{X}$ is the price of $\mathrm{X}, \mathrm{P}_{\mathrm{Y}}$ is the price of good Y , and $\mathrm{P}_{\mathrm{W}}$ is the price of input W . If $\mathrm{P}_{\mathrm{X}}=100, \mathrm{P}_{\mathrm{Y}}=150$, $\mathrm{P}_{\mathrm{W}}=50$, then the supply curve is
A) $\mathrm{Q} \times{ }^{\mathrm{s}}=550$.
B) $\mathrm{Q} \mathrm{x}^{\mathrm{s}}=150+\mathrm{P} \mathrm{x}^{\text {. }}$
C) $\mathrm{Q} \mathrm{x}^{\mathrm{s}}=550+\mathrm{P}$.
D) $\mathrm{Q} \mathrm{x}^{\mathrm{s}}=350+\mathrm{P} \mathrm{x}$.
79) If an excise tax is imposed on a good, then the supply curve
A) shifts up by the amount of the demand elasticity.
B) does not change.
C) shifts down by the amount of the tax.
D) shifts up by the amount of the tax.
80) Producer surplus is the
A) area above the supply curve but below the demand curve.
B) area above the supply curve but below the market price of the good.
C) minimum amount required by a producer to produce the first unit of the good.
D) maximum amount a producer can collect from consumers.
81) When quantity demanded exceeds quantity supplied,
A) there exists a surplus of a good.
B) the price tends to fall.
C) the price is below the equilibrium price.
D) there is no excess demand.
82) Competitive market equilibrium
A) is determined by the intersection of the market demand and supply curves.
B) implies that quantity supplied is sufficiently larger than quantity demanded.
C) is determined by the intersection of the excess demand and excess supply curves.
D) implies that quantity demanded is sufficiently larger than quantity supplied.
83) A price ceiling is
A) the minimum legal price that can be charged in a market.
B) the maximum legal price that can be charged in a market.
C) above the initial equilibrium price.
D) equal to the initial equilibrium price.
84) Under a price ceiling, the full economic price is
A) the dollar price paid to the firm.
B) the opportunity cost of not being able to buy a good when a consumer needs it.
C) lower than the free-market price.
D) higher than the free-market price.
85) When an effective price ceiling is in place,
A) every consumer is better off.
B) every consumer is worse off.
C) some consumers are better off and others are worse off.
D) on average the net change in consumer surplus is zero.
86) A price floor is
A) the minimum legal price that a firm can charge.
B) the maximum legal price that can be charged in a market.
C) below the initial market equilibrium price.
D) equal to the initial market equilibrium price.
87) The minimum wage
A) is an example of a price floor.
B) leads to an increase in the number of people employed in unskilled jobs.
C) leads to a decrease in the number of people employed in skilled jobs.
D) causes an increase in social welfare.
88) If demand increases, then the
A) demand curve shifts to the left.
B) demand curve shifts to the right.
C) equilibrium price goes down.
D) equilibrium quantity goes down.
89) If supply increases, then the
A) supply curve shifts to the left.
B) equilibrium price goes down.
C) equilibrium quantity goes down.
D) demand curve shifts to the right.
90) Producer surplus is measured as the area
A) below the demand curve and above the market price.
B) above the demand curve and below the market price.
C) above the supply curve and below the market price.
D) below the supply curve and above the market price.
91) When the government imposes a price ceiling above the market price, the result will be that
A) surpluses occur, which will cause the equilibrium price to fall to the equilibrium price.
B) shortages become a problem.
C) supply and demand will shift up to the new equilibrium.
D) a price floor set above the equilibrium price will have no effect on the market equilibrium.
92) Jane pays the market price of $\$ 69$ for a new pair of running shoes, even though she would be happy to pay a maximum of $\$ 100$ for the same pair of shoes. This is an example of the concept of
A) producer surplus.
B) price ceilings.
C) full economic prices.
D) consumer surplus.
93) In a competitive market, the market demand is $Q^{d}=70-3 P$ and the market supply is $Q^{s}$ $=6 \mathrm{P}$. A price ceiling of $\$ 4$ will result in a
A) shortage of 24 units.
B) shortage of 34 units.
C) surplus of 58 units.
D) surplus of 34 units.
94) The law of demand indicates that as the price of a good increases, the quantity that
A) producers are willing to produce of an item increases.
B) producers are willing to produce of an item decreases.
C) buyers are able to purchase increases.
D) buyers are able to purchase decreases.
95) Which of the following is probably not a normal good?
A) designer jeans
B) diamond rings
C) bus travel
D) new automobiles
96) Which of the following pairs of goods are probably complements?
A) electricity and natural gas
B) butter and margarine
C) steak and chicken
D) ketchup and potato fries
97) Graphically, an increase in the number of vegetarians will cause the demand curve for tofu (meat substitute) to
A) shift rightward.
B) shift leftward.
C) become flatter.
D) become steeper.
98) Suppose the demand for good $X$ is given by $Q^{d}{ }_{x}=20-4 P_{x}+2 P_{y}+M$. The price of good X is $\$ 5$, the price of good Y is $\$ 15$, and income is $\$ 150$. Given these prices and income, how much of good X will be purchased?
A) 160
B) 180
C) 220
D) 250
99) For a wood furniture manufacturer, an increase in the cost of lumber will cause the supply curve to
A) become flatter.
B) become steeper.
C) shift to the left.
D) shift to the right.
100) Demand shifters do not include the
A) price of the good.
B) consumer's tastes and preferences.
C) the price of the other related goods.
D) consumer's expectations about future prices of the good.
101) Good $X$ is an inferior good if a decrease in income leads to
A) an increase in the supply of good X .
B) a decrease in the supply of good X .
C) an increase in the demand for good X .
D) a decrease in the demand for good X .
102) All else being held constant, as additional firms enter an industry,
A) more output is available at each given price.
B) less output is available at each given price.
C) the same output is available at each given price.
D) output could increase or decrease at each given price.
103) An excise tax of $\$ 1.00$ per gallon of gasoline placed on the suppliers of gasoline would shift the supply curve
A) down by $\$ 1.00$.
B) down by more than $\$ 1.00$.
C) up by $\$ 1.00$.
D) up by less than $\$ 1.00$.
104) Suppose there is a simultaneous increase in demand and decrease in supply, what effect will this have on the equilibrium price?
A) It will rise.
B) It will fall.
C) It may rise or fall.
D) It will remain the same.
105) Given a linear demand function of the form $\mathrm{Qx}^{\mathrm{d}}=100-0.5 \mathrm{P}_{\mathrm{x}}$, find the inverse linear demand function.
A) $P x=200-2 Q x$.
B) $P x=100-0.5 Q x$.
C) $P x=100-2 Q x$.
D) $P x=100 Q x-0.5 P x$.
106) Given a linear demand function of the form $Q_{X}{ }^{d}=500-2 P_{X}-3 P_{Y}+0.01 \mathrm{M}$, find the inverse linear demand function assuming $\mathrm{M}=20,000$ and $\mathrm{P}_{\mathrm{Y}}=10$.
A) $P x=500-2 Q \mathrm{x}-3 \mathrm{P} \mathrm{y}+0.01 \mathrm{M}$.
B) $P \mathrm{x}=335-0.5 \mathrm{Q} \mathrm{x}$.
C) $P x=335-2 Q x$.
D) $P x=500-2 Q x$.
107) Given a linear supply function of the form $\mathrm{Qx}^{S}=-10+5 \mathrm{P}_{\mathrm{x}}$, find the inverse linear supply function.
A) $\mathrm{P} x=2+0.2 \mathrm{Q} \mathrm{x}$.
B) $P \mathrm{x}=-10+0.2 \mathrm{Q} \mathrm{x}$.
C) $P x=-10+5 Q x$.
D) $P x=2+5 Q x$.
108) Given a linear supply function of the form $\mathrm{Qx}^{S}=3,000+3 \mathrm{P}_{\mathrm{x}}-2 \mathrm{P}_{\mathrm{r}}-\mathrm{P}_{\mathrm{w}}$, find the inverse linear supply function assuming $\mathrm{P}_{\mathrm{r}}=\$ 1,000$ and $\mathrm{P}_{\mathrm{w}}=\$ 100$.
A) $\mathrm{Q} \mathrm{x}^{\mathrm{S}}=900+3 \mathrm{P} \mathrm{x}$.
B) $P x=300+0.3333 Q x$.
C) $P x=-300+0.3333 Q x$.
D) $P x=2,900+3 P x$.
109) Suppose the market demand for good $X$ is given by $Q x^{d}=20-2 P x$. If the equilibrium price of X is $\$ 5$ per unit, then consumer surplus is
A) $\$ 100$.
B) $\$ 75$.
C) $\$ 50$.
D) $\$ 25$.
110) Suppose the market demand for good $X$ is given by $Q_{x}{ }^{d}=20-2 P_{x}$. If the equilibrium price of X is $\$ 5$ per unit, then the consumer surplus the consumer receives from consuming the quantity bought is
A) $\$ 100$.
B) $\$ 75$.
C) $\$ 50$.
D) $\$ 25$.
111) Suppose the market demand for good $X$ is given by $Q x^{d}=20-2 P x$. If the equilibrium price of $X$ is $\$ 5$ per unit, then consumers' expenditure on $X$ is
A) $\$ 5$.
B) $\$ 25$.
C) $\$ 50$.
D) an indeterminable amount due to the lack of sufficient information.
112) Suppose the market supply for good $X$ is given by $\mathrm{Qx}^{S}=-100+5 \mathrm{P}_{\mathrm{x}}$. If the equilibrium price of X is $\$ 100$ per unit, then the producer surplus is
A) $\$ 400$.
B) $\$ 1,600$.
C) $\$ 16,000$.
D) $\$ 32,000$.
113) Suppose the market supply for good $X$ is given by $Q_{X}{ }^{s}=-100+5 P_{x}$. If the equilibrium price of X is $\$ 100$ per unit, then producers' revenue from X is
A) $\$ 100$.
B) $\$ 20,000$.
C) $\$ 40,000$.
D) an indeterminable amount due to the lack of sufficient information.
114) Consider a market characterized by the following inverse demand and supply functions: $\mathrm{P}_{\mathrm{X}}=10-2 \mathrm{Q}_{\mathrm{X}}$ and $\mathrm{P}_{\mathrm{X}}=2+2 \mathrm{Q}_{\mathrm{X}}$. Compute the surplus received by consumers and producers.
A) $\$ 24$ and $\$ 24$, respectively
B) $\$ 4$ and $\$ 4$, respectively
C) $\$ 2$ and $\$ 6$, respectively
D) $\$ 6$ and $\$ 2$, respectively
115) Consider a market characterized by the following inverse demand and supply functions: $\mathrm{P}_{\mathrm{x}}=10-2 \mathrm{Qx}_{\mathrm{x}}$ and $\mathrm{P}_{\mathrm{x}}=2+2 \mathrm{Qx}_{\mathrm{x}}$. Compute the equilibrium price and quantity in this market.
A) $\$ 24$ and 24 units, respectively
B) $\$ 4$ and 4 units, respectively
C) $\$ 2$ and 6 units, respectively
D) $\$ 6$ and 2 units, respectively
116) Consider a market characterized by the following inverse demand and supply functions: $\mathrm{P}_{\mathrm{X}}=10-2 \mathrm{Q}_{\mathrm{X}}$ and $\mathrm{P}_{\mathrm{X}}=2+2 \mathrm{Q}_{\mathrm{x}}$. Compute the number of units exchanged and the price at which those units will be exchanged when there is an $\$ 8$ per unit price floor.
A) 1 unit and $\$ 6$ per unit
B) 1 unit and $\$ 8$ per unit
C) 3 units and $\$ 6$ per unit
D) 3 units and $\$ 8$ per unit
117) Consider a market characterized by the following inverse demand and supply functions: $\mathrm{P}_{\mathrm{X}}=10-2 \mathrm{Q}_{\mathrm{x}}$ and $\mathrm{P}_{\mathrm{X}}=2+2 \mathrm{Qx}$. An $\$ 8$ per unit price floor will result in a
A) shortage of 1 unit.
B) surplus of 2 units.
C) shortage of 3 units.
D) surplus of 3 units.
118) Consider a market characterized by the following inverse demand and supply functions: $\mathrm{P}_{\mathrm{X}}=10-2 \mathrm{Q}_{\mathrm{x}}$ and $\mathrm{P}_{\mathrm{X}}=2+2 \mathrm{Q}_{\mathrm{x}}$. Compute the surplus consumers receive when an $\$ 8$ per unit price floor is imposed on the market.
A) $\$ 0$
B) $\$ 1$
C) $\$ 3$
D) $\$ 5$
119) Consider a market characterized by the following inverse demand and supply functions:
 price floor is imposed on the market.
A) $\$ 1$
B) $\$ 2$
C) $\$ 3$
D) $\$ 5$
120) Consider a market characterized by the following inverse demand and supply functions:
$\mathrm{P}_{\mathrm{X}}=10-2 \mathrm{Q}_{\mathrm{x}}$ and $\mathrm{P}_{\mathrm{X}}=2+2 \mathrm{Q}_{\mathrm{x}}$. Compute the loss in social welfare (dead weight loss) when an $\$ 8$ per unit price floor is imposed on the market.
A) $\$ 0$
B) $\$ 1$
C) $\$ 2$
D) $\$ 3$
121) The seller side of the market is known as the
A) income side.
B) demand side.
C) supply side.
D) seller side.
122) Suppose both supply and demand increase. What effect will this have on the equilibrium price?
A) It will fall.
B) It will rise.
C) It may rise or fall.
D) It will remain the same.
123) Suppose both supply and demand increase. What effect will this have on the equilibrium quantity?
A) It will fall.
B) It will rise.
C) It may rise or fall.
D) It will remain the same.
124) Suppose supply decreases and demand increases. What effect will this have on the price?
A) It will fall.
B) It will rise.
C) It may rise or fall.
D) It will remain the same.
125) Suppose supply decreases and demand increases. What effect will this have on the quantity?
A) It will fall.
B) It will rise.
C) It may rise or fall.
D) It will remain the same.
126) In a competitive market, the market demand is $Q^{d}=60-6 P$ and the market supply is $Q^{s}$ $=4 \mathrm{P}$. A price floor of $\$ 9$ will result in a
A) shortage of 30 units.
B) shortage of 12 units.
C) surplus of 30 units.
D) surplus of 12 units.
127) Other things being held constant, the lower the price of a good,
A) the lower the demand.
B) the higher the demand.
C) the greater the consumer surplus.
D) the lower the consumer surplus.
128) Other things being held constant, the higher the price of a good,
A) the lower the producer surplus.
B) the greater the producer surplus.
C) the higher the supply.
D) the lower the supply.
129) Other things being held constant, the lower the price of a good,
A) the lower the producer surplus.
B) the greater the producer surplus.
C) the higher the supply.
D) the lower the supply.
130) If A and B are substitute goods, a decrease in the price of good A would
A) have no effect on the quantity demanded of B .
B) lead to an increase in demand for B.
C) lead to a decrease in demand for B.
D) not have an effect on the quantity demanded of B nor lead to an increase or decrease in the demand for $B$.
131) If A and B are complementary goods, a decrease in the price of good A would
A) have no effect on the quantity demanded of B .
B) lead to an increase in demand for $B$.
C) lead to a decrease in demand for B.
D) not have an effect on the demand for B nor lead to an increase or decrease in the demand for $B$.
132) An excise tax of $\$ 1.00$ per gallon of gasoline placed on the suppliers of gasoline in a market with downward sloping demand and upward sloping supply would raise the equilibrium price
A) exactly $\$ 1.00$ per gallon.
B) by less than $\$ 1.00$ per gallon.
C) by more than $\$ 1.00$ per gallon.
D) an indeterminable amount as there is too little information.
133) Consider a market characterized by the following demand and supply conditions: $\mathrm{P}_{\mathrm{X}}=15$ $-2 Q_{x}$ and $P_{x}=3+2 Q_{x}$. The equilibrium price and quantity are, respectively,
A) $\$ 3$ and 9 units.
B) $\$ 9$ and 3 units.
C) $\$ 12$ and 4 units.
D) $\$ 4$ and 12 units.
134) Consider a market characterized by the following demand and supply conditions: $\mathrm{P}_{\mathrm{X}}=50$ $-5 Q_{x}$ and $P_{x}=32+Q_{x}$. The equilibrium price and quantity are, respectively,
A) $\$ 35$ and 3 units.
B) $\$ 3$ and 35 units.
C) $\$ 82$ and 50 units.
D) $\$ 20$ and 6 units.
135) In a competitive market, the market demand is $Q^{d}=400-5 P$ and the market supply is $Q^{s}$ $=10 \mathrm{P}-80$. A price ceiling of $\$ 32$ will result in
A) a shortage of 80 units.
B) a shortage of 44 units.
C) a surplus of 26 units.
D) neither a shortage nor a surplus.
136) In a competitive market, the market demand is $Q^{d}=400-5 P$ and the market supply is $Q^{s}$ $=10 \mathrm{P}-80$. The full economic price under a price ceiling of $\$ 25$ is
A) 46 .
B) 37 .
C) 32 .
D) 29 .
137) Suppose market demand and supply are given by $Q^{d}=300-4 P$ and $Q^{S}=-50+3 P$. The equilibrium price is
A) $\$ 35$.
B) $\$ 40$.
C) $\$ 50$.
D) $\$ 60$.
138) Suppose market demand and supply are given by $Q^{d}=300-4 P$ and $Q^{S}=-50+3 P$. The equilibrium quantity is
A) 100 .
B) 80 .
C) 115 .
D) 120 .
139) The supply function for good $X$ is given by $Q_{X}{ }^{s}=200+4 P_{X}-3 P_{Y}-5 P_{W}$, where $P_{X}$ is the price of $\mathrm{X}, \mathrm{P}_{\mathrm{Y}}$ is the price of good Y , and $\mathrm{P}_{\mathrm{W}}$ is the price of input W . If $\mathrm{P}_{\mathrm{X}}=500, \mathrm{P}_{\mathrm{Y}}=250, \mathrm{P}_{\mathrm{W}}=$ 30 , then the reduced form of the supply function is
A) $Q x^{s}=1,300$.
B) $Q \times{ }^{s}=-700+4 P \times$.
C) $\mathrm{Q} \times{ }^{\mathrm{s}}=-550+4 \mathrm{P}$.
D) $Q x^{s}=150+4 P{ }_{x}$.
140) In a competitive market, the market demand is $Q^{d}=150-2 P$ and the market supply is $Q^{s}$ $=30+4 \mathrm{P}$. A price ceiling of $\$ 16$ will result in a
A) shortage of 24 units.
B) shortage of 34 units.
C) surplus of 58 units.
D) surplus of 34 units.
141) If $A$ and $B$ are substitute goods, an increase in the price of good $A$ would
A) have no effect on the quantity demanded of B .
B) lead to an increase in demand for $B$.
C) lead to a decrease in demand for B.
D) lead to an indeterminable answer as there is insufficient information.
142) Consider a market characterized by the following inverse demand and supply functions: $\mathrm{P}_{\mathrm{X}}=40-4 \mathrm{Qx}_{\mathrm{x}}$ and $\mathrm{P}_{\mathrm{X}}=10+2 \mathrm{Qx}_{\mathrm{x}}$. Compute the surplus received by consumers and producers.
A) $\$ 25$ and $\$ 25$, respectively
B) $\$ 20$ and $\$ 40$, respectively
C) $\$ 40$ and $\$ 20$, respectively
D) $\$ 50$ and $\$ 25$, respectively
143) Consider a market characterized by the following inverse demand and supply functions: $\mathrm{P}_{\mathrm{X}}=50-4 \mathrm{Q}_{\mathrm{x}}$ and $\mathrm{P}_{\mathrm{X}}=10+2 \mathrm{Q}_{\mathrm{x}}$. Compute the surplus producers receive when a $\$ 30$ per unit price floor is imposed on the market.
A) $\$ 75$
B) $\$ 25$
C) $\$ 35$
D) $\$ 50$
144) The demand for good X is given by $\mathrm{Q}_{x}=4,000-\mathrm{P}_{\mathrm{X}}-2 \mathrm{P}_{Y}+4 \mathrm{P}_{Z}+0.2 \mathrm{M}$, where $\mathrm{P}_{Y}$ is the price of $\operatorname{good} \mathrm{Y}, \mathrm{P}_{\mathrm{Z}}$ is the price of $\operatorname{good} \mathrm{Z}$, and M is income. If $\mathrm{P}_{\mathrm{Y}}=\$ 800, \mathrm{P}_{\mathrm{Z}}=\$ 200$ and $\mathrm{M}=$ $\$ 5000$, what is the inverse demand function for good X ?
A) $P x=1,200-2 Q x$.
B) $P x=4,200-Q x$.
C) $P \mathrm{x}=3,200-\mathrm{Q} \mathrm{x}$.
D) $P x=4,600-2 Q x$.
145) The demand curve for product $X$ is given by $Q_{x}=50-2 P_{x}$. How much consumer surplus do consumers receive when $\mathrm{P}_{\mathrm{X}}=\$ 5$ ?
A) $\$ 400$
B) $\$ 200$
C) $\$ 100$
D) $\$ 500$
146) Based on the graph, the resulting consumer and producer surplus at a price of $\$ 25$ are, respectively,

A) $\$ 4,000$ and $\$ 4,000$.
B) $\$ 9,000$ and $\$ 4,000$.
C) $\$ 2,000$ and $\$ 4,000$.
D) $\$ 4,000$ and $\$ 9,000$.
147) Based on the graph, which of the following movements show the effect of a decrease in income for good X an inferior good?

A) point A to point B
B) point A to point D
C) point D to point A
D) point B to point A
148) What is the effect of an increase in wages paid to workers employed in manufacturing bicycles?
A) Demand curve for bicycles shifts to the right.
B) Demand curve for bicycles shifts to the left.
C) Supply curve for bicycles shifts to the left.
D) Supply curve for bicycles shifts to the right.
149) Assume for the graph that the initial equilibrium price and quantity are $\$ 10$ and 500. If the price increases to $\$ 12$, then consumer surplus

A) falls by $\$ 900$.
B) increases by $\$ 900$.
C) falls by $\$ 1,600$.
D) increases by $\$ 2,500$.
150) Which of the following can lead to a decrease in quantity demanded of pizza rolls?
A) an increase in income
B) a decrease in income
C) an increase in price of pizza rolls
D) a decrease in price of pizza rolls
151) Suppose the graph shows the market of bicycle helmets. The equilibrium price is $\$ 10$. To make helmets more affordable, the government imposes a price ceiling of $\$ 6$. Thus, the full economic price due to the price ceiling is

A) $\$ 12$.
B) $\$ 6$.
C) $\$ 18$.
D) indeterminable.
152) Suppose the graph shows the market of bicycle helmets. The equilibrium price is $\$ 10$. To make helmets more affordable, the government imposes a price ceiling of $\$ 6$ for bicycle helmets. Thus the nonpecuniary price is

A) $\$ 12$.
B) $\$ 6$.
C) $\$ 18$.
D) indeterminable.
153) Which of the following leads to a decrease in demand for mechanical pencils (a normal good)?
A) an increase in incomes
B) a decrease in price of mechanical pencils
C) an increase in price of mechanical pencils
D) a decrease in price of lead pencils, which is a substitute for mechanical pencils
154) A lump sum or a fixed tax of $\$ 1$ on ticket rides in amusement parks will change the equilibrium price of ticket rides by
A) $\$ 1$.
B) less than $\$ 1$.
C) more than $\$ 1$.
D) an indeterminable amount.
155) Suppose the graph shows the market for wheat. The equilibrium price is $\$ 25$. To support incomes of farmers, the government imposes a price floor of $\$ 35$. What is the cost of the program borne by the government?

A) $\$ 21,000$
B) $\$ 15,000$
C) $\$ 14,000$
D) $\$ 12,000$
156) Suppose the graph shows the market of wheat. The equilibrium price is $\$ 25$ of wheat. To support incomes of farmers, the government imposes a price floor of $\$ 35$. What is the resulting producer surplus at $\$ 35$ ?

A) $\$ 5,000$
B) $\$ 7,000$
C) $\$ 14,000$
D) $\$ 4,000$
157) All else being held constant, when number of buyers of soda drinks increase,
A) the supply curve shifts to the right and more output is available at each given price.
B) the supply curve shifts to the left and less output is available at each given price.
C) the demand curve shifts to the right and more output is demanded at each given price.
D) the demand curve shifts to the left and less output is demanded at each given price.
158) The market demand for cheese is $Q^{d}=30-2 P$ and the market supply is $Q^{s}=4 P$. The government imposes a price floor of $\$ 4$ in the market for cheese. This will
A) not change the equilibrium price of cheese.
B) create an excess demand of 4 units.
C) create an excess supply of 4 units.
D) possibly not change the equilibrium price as well as create excess demand and excess supply of 4 units.
159) Assume that hot dogs and hot dog buns are complementary goods. If the price of hot dog buns rises, all else being constant, then this will cause
A) an increase in the demand for hot dogs.
B) a decrease in the demand for hot dogs.
C) an increase in the quantity demanded of hot dogs.
D) a decrease in the quantity demanded of hot dogs.
160) Assume that hot dog and hot dog buns are complementary goods. If the price of hot dog buns falls, all else constant, then this will cause
A) an increase in the demand for hot dogs.
B) a decrease in the demand for hot dogs.
C) an increase in demand for hot dog buns.
D) a decrease in the quantity demanded for hot dog buns.
161) Based on the graph, if the government imposes a price ceiling of $\$ 30$ in this market, then over time, there will be

A) a surplus of 200 units.
B) a shortage of 200 units.
C) neither a shortage nor a surplus as price will settle at equilibrium.
D) a surplus of 100 units.
162) Based on the graph, if the government imposes a price floor of $\$ 25$ in this market then over time, there will be

A) neither a shortage or a surplus as price will settle at equilibrium.
B) a surplus of 100 units.
C) a surplus of 200 units.
D) a shortage of 200 units.
163) The market for oranges is in equilibrium. Now suppose that a cold snap hits Florida, and at the same time a new research shows that eating oranges reduces risk of heart disease. What will be the effect of these changes on the equilibrium price and quantity in orange market?
A) Price will increase, and quantity will increase.
B) Price will decrease, and quantity will increase.
C) Price will increase, and effect on quantity is ambiguous.
D) Quantity will decrease, and effect on price is ambiguous.
164) The market for oranges is in equilibrium. Now suppose that a cold snap hits Florida and at the same time a new research shows that eating oranges increases risk of heart disease. What will be the effect of these changes on the equilibrium price and quantity in orange market?
A) Quantity will decrease, and effect on price is ambiguous.
B) Price will increase, and quantity will increase.
C) Price will decrease, and quantity will increase.
D) Price will increase, and effect on quantity is ambiguous.
165) Consider the market for bicycles (a normal good). All else being constant, when the price of an input needed to make bicycles increases,
A) the supply curve shifts to the right and more bicycles are available at each given price.
B) the supply curve shifts to the left and less bicycles are available at each given price.
C) the demand curve shifts to the right and more bicycles are demanded at each given price.
D) the demand curve shifts to the left and less bicycles are demanded at each given price.
166) Consider the market for bicycles (a normal good). All else being constant, when price of an input needed to make bicycles decreases,
A) the supply curve shifts to the right and more bicycles are available at each given price.
B) the supply curve shifts to the left and less bicycles are available at each given price.
C) the demand curve shifts to the right and more bicycles are demanded at each given price.
D) the demand curve shifts to the left and less bicycles are demanded at each given price.
167) Suppose the demand for $X$ is given by $Q_{X}{ }^{d}=80-P_{X}+3 P_{Y}+5 M+3 A$, where $P_{X}$ represents the price of $\operatorname{good} \mathrm{X}, \mathrm{P}_{\mathrm{Y}}$ is the price of $\operatorname{good} \mathrm{Y}, \mathrm{M}$ is income, and A is the amount of advertising on good X . Based on this information, we know that
A) $\operatorname{good} \mathrm{X}$ is a substitute for good Y .
B) $\operatorname{good} \mathrm{X}$ is a complement for good Y .
C) $\operatorname{good} \mathrm{Y}$ is a normal good.
D) good X is an inferior good.
168) Suppose the demand for $X$ is given by $Q_{x d}=80-P_{X} 3 P_{Y} 5 M+3 A$, where $P_{X}$ represents the price of good $\mathrm{X}, \mathrm{P}_{\mathrm{Y}}$ is the price of good $\mathrm{Y}, \mathrm{M}$ is income, and A is the amount of advertising on good X. Based on this information, we know that
A) good X is a normal good.
B) $\operatorname{good} \mathrm{X}$ is a complement for good Y .
C) $\operatorname{good} \mathrm{Y}$ is a normal good.
D) $\operatorname{good} \mathrm{X}$ is an inferior good.
169) Suppose the graph shows the market for bushels of wheat. What is consumer surplus at \$35?

A) $\$ 4,500$
B) $\$ 1,000$
C) $\$ 400$
D) $\$ 100$
170) Suppose the graph shows the market for bushels of wheat. What is producer surplus at 20 ?

A) $\$ 2,250$
B) $\$ 4,000$
C) $\$ 4,500$
D) $\$ 950$

## Answer Key

Test name: Managerial 02

1) A
2) $C$
3) $B$
4) $D$
5) A
6) C
7) A
8) B
9) C
10) A
11) D
12) C
13) D
14) C
15) B
16) C
17) A
18) D
19) B
20) D
21) C
22) D
23) B
24) A
25) C
26) A
27) B
28) C
29) D
30) B
31) B
32) D
33) D
34) D
35) D
36) A
37) D
38) A
39) C
40) B
41) D
42) C
43) B
44) A
45) B
46) B
47) C
48) B
49) B
50) A
51) D
52) C
53) D
54) A
55) B
56) A
57) D
58) B
59) B
60) A
61) D
62) C
63) A
64) A
65) D
66) B
67) C
68) B
69) C
70) C
71) B
72) A
73) B
74) C
75) A
76) B
77) B
78) B
79) D
80) B
81) C
82) A
83) B
84) D
85) C
86) A
87) A
88) B
89) B
90) C
91) A
92) D
93) B
94) D
95) C
96) D
97) A
98) B
99) C
100) A
101) C
102) A
103) C
104) A
105) A
106) B
107) A
108) C
109) D
110) B
111) C
112) C
113) C
114) B
115) D
116) B
117) B
118) B
119) D
120) C
121) C
122) C
123) B
124) B
125) C
126) C
127) C
128) B
129) A
130) C
131) B
132) B
133) B
134) A
135) D
136) A
137) C
138) A
139) B
140) A
141) B
142) D
143) A
144) B
145) A
146) A
147) B
148) C
149) A
150) C
151) A
152) B
153) D
154) B
155) C
156) A
157) C
158) A
159) B
160) A
161) C
162) A
163) C
164) A
165) B
166) A
167) B
168) A
169) B
170) A
