

Economics for Managers, 3e, GE (Farnham)

Chapter 2 Demand, Supply, and Equilibrium Prices

1) According to the case for analysis (Demand and Supply in the Copper Industry) in the text, all of the following can lead to a decline in the price of copper *except*:

- A) steady production uninterrupted by labor strikes or natural disasters.
- B) substitution away from copper to other materials such as aluminum and plastic.
- C) an increase in mining of higher grade materials.
- D) a surge in demand from foreign importers.

Answer: D

Diff: 1

Topic: Case for analysis: copper

2) All else constant, as more firms substitute alternative materials, e.g., plastic, for copper, the market price of copper would be expected to:

- A) increase.
- B) stay the same.
- C) decrease.
- D) cannot be determined with the information given.

Answer: C

Diff: 2

Topic: Case for analysis: copper

3) "Demand" is best defined as the relationship between:

- A) the price of a good and the quantity consumers are willing and able to buy at each price level.
- B) the current price of a good and the quantity demanded at that price.
- C) the quantity supplied and the price people are willing to pay for a good.
- D) the amount of income someone has and the price he is willing to pay for a good.

Answer: A

Diff: 1

Topic: Definition of demand

4) All of the following are non-price factors that influence demand *except*:

- A) tastes and preferences.
- B) quantity supplied.
- C) income.
- D) the prices of related goods.

Answer: B

Diff: 1

Topic: Factors influencing demand

5) A home theater system and an HD television would be considered an example of:

- A) substitute goods.
- B) giffen goods.
- C) inferior goods.
- D) complementary goods.

Answer: D

Diff: 2

Topic: Complements in consumption

6) DSL and broadband internet service would be considered an example of:

- A) substitute goods.
- B) giffen goods.
- C) inferior goods.
- D) complementary goods.

Answer: A

Diff: 2

Topic: Substitutes in consumption

7) Many people consider hot dogs to be an *inferior* good. For such people, all else held constant, a decrease in income would cause their demand for hot dogs to:

- A) increase.
- B) stay the same.
- C) decrease.
- D) cannot be determined with the information given.

Answer: A

Diff: 2

Topic: Inferior goods

8) If the price of salmon increases relative to the price of cod, the demand for:

- A) cod will decrease.
- B) cod will increase.
- C) salmon will decrease.
- D) salmon will increase.

Answer: B

Diff: 2

Topic: Price changes and substitute goods

9) If movies on DVD for home rental and movies seen at a theater are substitutes, and the price of movies seen at a theater increases, the demand for movies on DVD will:

- A) increase.
- B) stay the same.
- C) decrease.
- D) cannot be determined.

Answer: A

Diff: 2

Topic: Price changes and substitute goods

10) An increase in the number of buyers in the market for LED TVs would cause the market demand curve for LED TVs to:

- A) shift right.
- B) shift left.
- C) stay the same because market demand doesn't depend on the number of buyers.
- D) shift left or right depending on whether the new buyers purchase more or less than existing customers at each price.

Answer: A

Diff: 2

Topic: Change in demand

11) All else constant, all of the following would cause the demand curve for a good to shift *except*:

- A) a change in the cost of producing the good.
- B) a change in the price of a related good.
- C) a change in consumer's incomes.
- D) a change in the number of buyers.

Answer: A

Diff: 2

Topic: Change in demand

12) In the market for French wines, an increase in demand is illustrated by:

- A) a movement up the demand curve.
- B) a movement down the demand curve.
- C) a shift of the demand curve to the left.
- D) a shift of the demand curve to the right.

Answer: D

Diff: 2

Topic: Change in demand

13) Assume the demand function for good X can be written as $Q_d = 80 - 3P_x + 2P_y + 10I$, where P_x = the price of X, P_y = the price of good Y, and I = Consumer income. According to this equation:

- A) a rise in the price of Y would cause the demand for X to decrease.
- B) X and Y are complements
- C) X is an inferior good.
- D) X and Y are substitutes.

Answer: D

Diff: 2

Topic: Substitute goods

14) Referring to the previous question, all else constant, a one unit increase in the price of good Y would cause the quantity demanded of good X to:

- A) decrease by 2 units.
- B) increase by 2 units.
- C) decrease by 1 unit.
- D) decrease by 5 units.

Answer: A

Diff: 2

Topic: Substitute goods

15) "Supply" is best defined as the relationship between:

- A) the current price of a good and the quantity supplied at that price.
- B) the price of a good or service and the quantity supplied by producers at each price during a period of time.
- C) the cost of producing a good and the price consumers are willing to pay for it.
- D) the quantity supplied and the price people are willing to pay for a good.

Answer: B

Diff: 1

Topic: Definition of supply

16) Assume the demand function for good X can be written as $Q_d = 80 - 3P_x - 6P_y + 10I$, where P_x = the price of X, P_y is the price of Y and I is consumer income. If the price of Y decreases by 5 dollars, what would the reduction in P_x have to be in order to keep the quantity demanded of X unchanged by the change in the price of Y?

- A) decreased by 10 dollars
- B) decreased by 5 dollars
- C) decreased by 2.5 dollars
- D) decreased by 1 dollar

Answer: A

Diff: 3

Topic: Change in demand

17) Which of the following is *not* considered a factor that influences supply?

- A) Technology.
- B) Production taxes and subsidies.
- C) The number of buyers.
- D) Resource prices.

Answer: C

Diff: 1

Topic: Factors influencing supply

18) In the market for cell phones, all of the following would cause the supply of cell phones to change *except*:

- A) an improvement in the technology used to produce cell phones.
- B) an increase in the cost of labor used to produce cell phones.
- C) a change in cell phone producers' expectations.
- D) an increase in the number of buyers in the market for cell phones.

Answer: D

Diff: 2

Topic: Change in supply

19) Which of the following would *not* cause the supply curve for gasoline to shift?

- A) A change in the wages paid to gas station attendants.
- B) A change in the number of gas stations.
- C) A change in the incomes of drivers.
- D) A change in the cost of refining oil.

Answer: C

Diff: 2

Topic: Change in supply

20) All else held constant, an increase in foreign imports of cameras would cause the supply of cameras in the United States to:

- A) increase.
- B) stay the same.
- C) decrease.
- D) cannot be determined with the information given.

Answer: A

Diff: 2

Topic: Change in supply

21) Which of the following would cause a change in supply, as opposed to a change in quantity supplied, in the market for used homes?

- A) A decrease in the price of rental housing.
- B) A decrease in the mortgage rates.
- C) An increase in the incomes of home buyers.
- D) An increase in the number of buyers in the market for used homes.

Answer: A

Diff: 2

Topic: Change in supply

22) Which of the following statements is *correct*?

- A) A change in demand or supply can only be caused by a change in price.
- B) A simultaneous decrease in demand and increase in supply will result in an increase in equilibrium price and uncertain effect on quantity.
- C) If price is currently above equilibrium, market adjustments will result in a decrease in price and quantity supplied.
- D) An increase in supply invariably leads to a shortage in the affected market.

Answer: C

Diff: 3

Topic: Change in market equilibrium

23) Assume the supply function for good X can be written as $Q_s = -100 + 27P_x - 5P_y - 1.8W$, where P_x = the price of X, P_y = the price of good Y, and W = Wage index for workers in industry X. According to this equation:

- A) X and Y are substitutes in production.
- B) X and Y are complements in production.
- C) a decrease in wages would cause a decrease in the quantity supplied at each price.
- D) each one unit increase in price causes quantity supplied to increase by 73 units.

Answer: A

Diff: 2

Topic: Substitutes in production

24) Referring to the previous question, all else constant, a 5 unit increase in the wage index would cause:

- A) quantity supplied to increase by 9 units and be shown by a movement up the supply curve.
- B) quantity supplied to decrease by 9 units and be shown by a movement down the supply curve.
- C) quantity supplied to increase by 9 units and be shown by a rightward shift of the supply curve.
- D) quantity supplied to decrease by 9 units and be shown by a leftward shift of the supply curve.

Answer: D

Diff: 3

Topic: Change in supply

25) Assume declining profits in the market for Internet service force several firms in the area to drop out of the market. All else constant, this would cause the:

- A) equilibrium price and quantity to decrease.
- B) equilibrium price and quantity to increase.
- C) equilibrium price to increase and equilibrium quantity to decrease.
- D) equilibrium price to decrease and equilibrium quantity to increase.

Answer: C

Diff: 2

Topic: Change in supply and market equilibrium

26) Assume declining profits in the market for Internet service force several firms in the area to drop out of the market. Which of the following best describes the effect of the reduction in the number of service providers and the subsequent adjustment of the market to the new equilibrium price and quantity?

A) Quantity supplied would decrease, creating excess supply at the initial equilibrium price. Demand would then decrease until quantity demanded and quantity supplied are once again equal.

B) Quantity supplied would decrease, creating excess demand at the initial equilibrium price. Demand would then decrease until quantity demanded and quantity supplied are once again equal.

C) Supply would increase, creating excess demand at the initial equilibrium price. Price would then rise, causing quantity demanded to decrease and quantity supplied to increase until a new equilibrium is reached.

D) Supply would decrease, creating excess demand at the initial equilibrium price. Price would then rise, causing quantity demanded to decrease and quantity supplied to increase until a new equilibrium is reached.

Answer: D

Diff: 3

Topic: Market adjustment to a change in supply

27) Assume that in the market for plasma TVs there is an increase in supply. The result will be:

A) an increase in equilibrium price and quantity.

B) a decrease in equilibrium price and quantity.

C) an increase in equilibrium quantity and uncertain effect on equilibrium price.

D) a decrease in equilibrium price and increase in equilibrium quantity.

Answer: D

Diff: 2

Topic: Change in supply and market equilibrium

28) As the price of milk increases, what would reasonably be expected to happen to the equilibrium price and equilibrium quantity of cereal? (Milk and cereal are complements.)

A) Equilibrium price would increase and equilibrium quantity would decrease.

B) Equilibrium price and quantity would both decrease.

C) Equilibrium price would decrease and equilibrium quantity would increase.

D) Equilibrium price and quantity would both increase.

Answer: B

Diff: 2

Topic: Complements and market equilibrium

29) As the price of milk increases, what happens at the original equilibrium in the market for cereal that signals market participants that the original equilibrium must change? (Milk and cereal are complements.)

- A) A surplus is created by an increase in supply.
- B) A surplus is created by a decrease in demand.
- C) A shortage is created by an increase in demand.
- D) A shortage is created by a decrease in supply.

Answer: B

Diff: 2

Topic: Adjustment to equilibrium

30) Assume the income of consumers of good X (a normal good) increases. What occurs at the initial equilibrium price for X that signals market participants that the equilibrium price must change?

- A) A surplus is created by an increase in supply.
- B) A surplus is created by a decrease in demand.
- C) A shortage is created by an increase in demand.
- D) A shortage is created by a decrease in supply.

Answer: C

Diff: 2

Topic: Change in demand and market equilibrium

31) Referring to the previous question, which of the following best describes the adjustment to the new market equilibrium?

- A) Price would fall, causing quantity supplied to decrease until the new equilibrium is reached.
- B) Price would rise, causing quantity supplied to increase until the new equilibrium is reached.
- C) Price would fall, causing quantity supplied to increase until the new equilibrium is reached.
- D) Price would rise, causing quantity supplied to decrease until the new equilibrium is reached.

Answer: B

Diff: 2

Topic: Change in demand and market equilibrium

32) In the market for a normal good, what is the ultimate market reaction of suppliers to an increase in the incomes of consumers?

- A) Suppliers do not react, because a change in income shifts the demand curve, not the supply curve.
- B) The supply curve shifts to the right.
- C) The supply curve shifts to the left.
- D) Quantity supplied increases as the equilibrium moves along the supply curve due to a rise in the demand.

Answer: D

Diff: 2

Topic: Change in demand and effect on market equilibrium

33) All else constant, an increase in the number of buyers in the market for cell phone service would cause:

- A) equilibrium price and quantity to increase.
- B) equilibrium price and quantity to decrease.
- C) equilibrium price to increase and equilibrium quantity to decrease.
- D) equilibrium price to decrease and equilibrium quantity to increase.

Answer: A

Diff: 2

Topic: Change in demand and market equilibrium

34) Assume there is an improvement in the technology used to produce Blu-ray disc players. What could be expected to happen to the equilibrium price and quantity in the market for Blu-ray disc players?

- A) Equilibrium price would increase and equilibrium quantity would decrease.
- B) Equilibrium price and quantity would both decrease.
- C) Equilibrium price would decrease and equilibrium quantity would increase.
- D) Equilibrium price and quantity would both increase.

Answer: C

Diff: 2

Topic: Change in supply and market equilibrium

35) Assume an auto firm's factories are capable of producing both large and small cars and are operating at full capacity. Assume the price of large cars increases due to a shift in consumers' preferences toward large cars and away from smaller cars. What would reasonably be expected to happen to the equilibrium price and quantity of the firm's small cars?

- A) Equilibrium price would increase and equilibrium quantity would decrease.
- B) Equilibrium price and quantity would both decrease.
- C) Equilibrium price would decrease and equilibrium quantity would increase.
- D) Equilibrium price and quantity would both increase.

Answer: B

Diff: 2

Topic: Change in demand and market equilibrium

36) Assume the auto market is initially in equilibrium with imports from Japan taking up a significant share of the market. Now assume a quota on imports of Japanese cars is established. What will occur at the initial equilibrium price to signal market participants regarding the change that has taken place?

- A) A surplus is created by an increase in supply.
- B) A surplus is created by a decrease in demand.
- C) A shortage is created by an increase in demand.
- D) A shortage is created by a decrease in supply.

Answer: D

Diff: 2

Topic: Change in supply and market equilibrium

37) Referring to the previous question, what will happen to the equilibrium price and quantity of cars?

- A) They will stay the same as domestic producers replace the cars once imported.
- B) The shortage will cause the equilibrium price to increase and equilibrium quantity will decrease.
- C) The surplus will cause equilibrium price to decrease and equilibrium quantity to increase.
- D) The shift in the demand curve will cause equilibrium price to increase and quantity to increase.

Answer: B

Diff: 2

Topic: Change in supply and market equilibrium

38) Assume the Congress approves increased drilling for oil in the U.S. to address the current energy shortage. People who are in favor of this policy argue that, *ceteris paribus*, this would cause:

- A) an increase in the equilibrium price and quantity of oil.
- B) a decrease in the equilibrium price and quantity of oil.
- C) a decrease in equilibrium price and increase in the equilibrium quantity of oil.
- D) an increase in equilibrium price and a decrease in the equilibrium quantity of oil.

Answer: C

Diff: 2

Topic: Change in supply and market equilibrium

39) Assume wages paid by a firm to its workers decrease. What will be the reaction of consumers as the market moves to its new equilibrium?

- A) Quantity demanded will decrease.
- B) Quantity demanded will increase.
- C) The demand curve will shift to the left.
- D) There will be no reaction by consumers, since input prices determine supply, not demand.

Answer: B

Diff: 2

Topic: Change in supply and market equilibrium

40) All else constant, a large decrease in the number of people who want to own sport utility vehicles (SUVs) because of their poor fuel efficiency could be expected to cause:

- A) an increase in the supply of SUVs.
- B) a decrease in the equilibrium price of gasoline.
- C) an increase in the equilibrium price of SUVs.
- D) an increase in the supply of gasoline.

Answer: B

Diff: 2

Topic: Change in demand and market equilibrium

41) Assuming there is a rise in supply of copper, if the market for copper is allowed to adjust, the ultimate result will be:

- A) an increase in price and an increase in the quantity demanded.
- B) an increase in price and an increase in the quantity supplied.
- C) a decrease in price and an increase in the quantity demanded.
- D) a decrease in price and an increase in the quantity supplied.

Answer: C

Diff: 2

Topic: Surplus and adjustment to market equilibrium

42) Which of the following best describes the influence of successful advertising on the market for aspirin?

- A) The market demand curve shifts to the right, creating a shortage at the original equilibrium price.
- B) Individuals' demand curves shift to the right, but the market demand curve remains at its original position.
- C) The market supply curve shifts to the right, creating a surplus at the original equilibrium price.
- D) The market supply curve for aspirin shifts to the right, causing equilibrium price to decrease.

Answer: A

Diff: 3

Topic: Change in demand and market equilibrium

43) Assume there is a reduction in the shipments of petroleum products due to political tension in the Persian Gulf. Which of the following would *not* be expected to happen?

- A) Oil companies would "ration" their supplies of gasoline by raising price.
- B) There would be a shortage of the original equilibrium price.
- C) Quantity demanded would decrease.
- D) The demand curve would shift to the left.

Answer: D

Diff: 2

Topic: Change in supply and market equilibrium

44) Assume there is a reduction in the shipments of petroleum products due to political tension in the Persian Gulf. In a market economy, which consumers would get the reduced supplies of gas?

- A) The consumers who value gasoline the most and are able to pay for it.
- B) Wealthy consumers.
- C) Lower income consumers.
- D) Who gets the gasoline would be a random process. Those who arrive at the service station first will get the gasoline, regardless what its price is.

Answer: A

Diff: 3

Topic: Effective demand

45) Assume the technology for producing personal computers improves and, at the same time, individuals discover new uses for personal computers so that there is greater utilization of personal computers. Which of the following will happen to equilibrium price and equilibrium quantity?

- A) Price will increase; quantity cannot be determined.
- B) Price will decrease; quantity cannot be determined.
- C) Quantity will increase; price cannot be determined.
- D) Quantity will decrease; price cannot be determined.

Answer: C

Diff: 3

Topic: Simultaneous change in supply and demand

46) Assume the cost of certain inputs used to produce artificial Christmas trees increases and, at the same time, the economy moves into a recession, causing the incomes of consumers to decrease. Which of the following will happen to the equilibrium price and quantity of artificial Christmas trees? (Assume artificial Christmas trees are normal goods.)

- A) Price will increase; quantity cannot be determined.
- B) Price will decrease; quantity cannot be determined.
- C) Quantity will increase; price cannot be determined.
- D) Quantity will decrease; price cannot be determined.

Answer: D

Diff: 3

Topic: Simultaneous change in supply and demand

47) Assume the costs of production in the U.S. auto industry are rising and, at the same time, the prices of Japanese-made autos are decreasing. What would reasonably be expected to happen to the equilibrium price and quantity of U.S.-made autos?

- A) Price will increase; quantity cannot be determined.
- B) Price will decrease; quantity cannot be determined.
- C) Quantity will increase; price cannot be determined.
- D) Quantity will decrease; price cannot be determined.

Answer: D

Diff: 3

Topic: Simultaneous change in supply and demand

48) Assume there is a simultaneous decrease in the cost of batteries used in hybrid cars and a shift in consumer preferences toward more fuel-efficient vehicles. Based on this, we can conclude, with certainty, that in the market for hybrid cars, equilibrium:

- A) price will decrease.
- B) price will increase.
- C) quantity will decrease.
- D) quantity will increase.

Answer: D

Diff: 3

Topic: Simultaneous change in supply and demand

49) Assume there is a simultaneous increase in home foreclosures and a decrease in consumer incomes. Based on this information we can conclude, with certainty, that in the market for used single-family homes equilibrium:

- A) price will increase.
- B) price will decrease.
- C) quantity will increase.
- D) quantity will decrease.

Answer: B

Diff: 3

Topic: Simultaneous change in supply and demand

50) Assume there is a simultaneous decrease in the incomes of people in the market for new homes and a decrease in the wages paid to carpenters, plumbers, and electricians. All else constant, we can predict, *with certainty*, that in the market for new homes the equilibrium:

- A) quantity of new homes will decrease.
- B) quantity of new homes will increase.
- C) price of new homes will decrease.
- D) price of new homes will increase.

Answer: C

Diff: 3

Topic: Simultaneous change in supply and demand

51) In the run up to the war in Iraq that began in 2003, one of the many concerns raised was that a war could result in a decrease in the supply of oil. At the same time, the U.S. economy was having a hard time recovering from the recession of 2001 and, as a result, incomes of many consumers had decreased (due to layoffs, wage cuts, and so forth). All else constant, it was reasonable to predict, *with certainty*, that the combination of these two factors would cause the equilibrium:

- A) quantity of oil to decrease.
- B) quantity of oil to increase.
- C) price of oil to increase.
- D) price of oil to decrease.

Answer: A

Diff: 3

Topic: Simultaneous change in supply and demand

52) In order to import German goods into the United States, U.S. importers must buy those goods with German currency, i.e., Euros. Assume, all else constant, there is a decrease in the price of U.S.-made cars compared to the price of German cars. Based on this information, we can conclude, *with certainty*, that in the market for Euros (where the price of Euros is measured in dollars), this would cause:

- A) an increase in the equilibrium price of Euros.
- B) a decrease in the equilibrium price of Euros.
- C) an increase in the equilibrium quantity of Euros.
- D) a decrease in the equilibrium quantity of Euros.

Answer: B

Diff: 3

Topic: Simultaneous change in supply and demand

53) File-sharing programs such as Napster, Kazaa, and iMesh make it possible for individuals to exchange music files over the Internet. All else constant, which of the following statements best describes how the development of these programs has affected the retail market for new music CDs?

- A) Demand for CDs has decreased, causing equilibrium price and quantity to decrease.
- B) Demand for CDs has increased, causing equilibrium price and quantity to increase.
- C) Demand for CDs has decreased, causing equilibrium price to decrease and equilibrium quantity to increase.
- D) Demand for CDs has increased, causing equilibrium price to increase and equilibrium quantity to decrease.

Answer: A

Diff: 2

Topic: Change in demand and market equilibrium

54) On September 3, 2003, Universal Music Group announced plans to reduce the wholesale price of music CDs it distributes by an average of 25-30 percent. All else constant (i.e., ignoring the effects of file-sharing programs), how would this change affect the retail market for new music CDs?

- A) Demand for CDs would increase, causing equilibrium price and quantity to increase.
- B) The supply of CDs would increase, causing equilibrium price to decrease and equilibrium quantity to increase.
- C) Demand for CDs would decrease, causing equilibrium price and quantity to decrease.
- D) The supply of CDs would decrease, causing equilibrium price to increase and equilibrium quantity to decrease.

Answer: B

Diff: 2

Topic: Change in supply and market equilibrium

55) File-sharing programs such as Napster, Kazaa, and iMesh make it possible for individuals to exchange music files over the Internet. On September 3, 2003, Universal Music Group announced plans to reduce the wholesale price of music CDs it distributes by an average of 25-30 percent. Which of the following statements is *correct* regarding the combined effects of the development of file-sharing programs and Universal Music Group's price change in the market for new music CDs?

- A) The equilibrium quantity of CDs would increase; the effect on equilibrium price is uncertain.
- B) The equilibrium quantity of CDs would decrease; the effect on equilibrium price is uncertain.
- C) The equilibrium price of CDs would increase; the effect on equilibrium quantity is uncertain.
- D) The equilibrium price of CDs would decrease; the effect on equilibrium quantity is uncertain.

Answer: D

Diff: 3

Topic: Simultaneous change in supply and demand

56) "Demand" refers to the relationship between the price of a good and the quantity consumers are willing and able to buy at each price.

Answer: TRUE

Diff: 1

Topic: Definition of demand

57) A "change in demand" is caused only by a change in the price of the good.

Answer: FALSE

Diff: 1

Topic: Change in demand versus change in quantity demanded

58) Assume goods X and Y are complements. A decrease in the price of X would cause the demand for Y to increase.

Answer: TRUE

Diff: 2

Topic: Change in the price of a complement

59) Assume goods X and Y are substitutes. An increase in the price of X would cause the demand for Y to increase.

Answer: TRUE

Diff: 2

Topic: Change in the price of a substitute

60) Assume the demand function for good X can be written as

$$Q_d = 80 - 3P_x + 2P_y + 10I$$

where P_x = the price of X,

P_y = the price of good Y, and

I = Consumer income.

This equation implies that X and Y are substitutes.

Answer: TRUE

Diff: 2

Topic: Substitutes in consumption

61) Assume the demand function for good X can be written as

$$Q_d = 80 - 3P_x - 2P_y + 10I$$

where P_x = the price of X,

P_y = the price of good Y, and

I = Consumer income.

This equation implies that X and Y are complements.

Answer: TRUE

Diff: 2

Topic: Complements in consumption

62) Assume X is an inferior good. If the incomes of people who buy X increase, demand for X will increase as well, but by a smaller percentage than the increase in income.

Answer: FALSE

Diff: 2

Topic: Inferior goods and income changes

63) The market demand for a good is determined by horizontally summing the demand curves of individual consumers.

Answer: TRUE

Diff: 1

Topic: Determining market demand

64) A decrease in the incomes of people who buy canoes would cause the demand for canoes to decrease.

Answer: TRUE

Diff: 2

Topic: Factors influencing demand

65) Prices of related goods are a determinant of demand but not supply.

Answer: FALSE

Diff: 1

Topic: Factors influencing demand and supply

66) The supply of a good is a function of price and the demand for the good.

Answer: FALSE

Diff: 1

Topic: Factors influencing supply

67) All else constant, an increase in the price of a good will cause the quantity supplied to increase.

Answer: TRUE

Diff: 1

Topic: Change in quantity supplied

68) An increase in the price of fuel and fertilizer used for corn would cause farmers to increase corn production in an effort to make up for lost profits.

Answer: FALSE

Diff: 2

Topic: Factors influencing supply

69) Assume the supply function for good X can be written as

$$Q_s = -100 + 27P_x - 5P_y - 1.8W$$

where P_x = the price of X,

P_y = the price of good Y, and

W = Wage index for workers in industry X.

This equation implies that X and Y are substitutes in production.

Answer: TRUE

Diff: 2

Topic: Substitutes in production

70) Assume the supply function for good X can be written as

$$Q_s = -100 + 27P_x - 5P_y - 1.8W$$

where P_x = the price of X,

P_y = the price of good Y, and

W = Wage index for workers in industry X.

This equation implies that X and Y are complements in production.

Answer: FALSE

Diff: 2

Topic: Complements in production

71) When the supply of a good increases, the quantity supplied at each price is increasing as well.

Answer: TRUE

Diff: 1

Topic: Change in supply

72) When price is greater than the market equilibrium price, a shortage is created.

Answer: FALSE

Diff: 2

Topic: Shortage versus surplus

73) When market price is higher than the equilibrium price, a surplus is created. This will put downward pressure on price, causing quantity demanded to increase and quantity supplied to decrease until equilibrium is reestablished.

Answer: TRUE

Diff: 2

Topic: Shortage versus surplus

74) Assume the market for cell phone service is initially in equilibrium. An increase in supply would cause a surplus at the initial equilibrium price. The market adjustment would then involve a decrease in price which would in turn cause quantity demanded to increase and quantity supplied to decrease until equilibrium is reestablished.

Answer: TRUE

Diff: 2

Topic: Change in supply and market equilibrium

75) Assume the market for used single-family homes is initially in equilibrium. All else constant, an increase in home foreclosures would cause equilibrium price and quantity to decrease.

Answer: FALSE

Diff: 2

Topic: Change in supply and market equilibrium

76) All else constant, an increase in the incomes of consumers in the market for diamonds would cause the supply of diamonds to increase.

Answer: FALSE

Diff: 2

Topic: Change in demand and market equilibrium

77) Assume that in an effort to help consumers, the government decides to reduce the amount of taxes it imposes on sellers of gasoline, that is, sellers are required to pay the government a smaller fee for each gallon of gas they sell. In the market for gas, this would have the effect of causing an increase in the supply of gas and a decrease in equilibrium price.

Answer: TRUE

Diff: 3

Topic: Change in supply and market equilibrium

78) Rent controls have the effect of keeping prices under control and maintaining an adequate supply of affordable housing for lower income people.

Answer: FALSE

Diff: 1

Topic: Price ceilings and market equilibrium

79) Federal subsidies to farmers can have the effect of creating a surplus in the market for certain crops.

Answer: TRUE

Diff: 1

Topic: Price floors and market equilibrium

80) Consider the market for air travel. A simultaneous increase in the price of fuel and another terrorist attack on United States soil would cause the equilibrium quantity of air travel to go down, but have an uncertain effect on equilibrium price.

Answer: TRUE

Diff: 3

Topic: Simultaneous change in supply and demand

81) A simultaneous improvement in the technology used to produce computers and increase in the number of buyers in the computer market would cause the equilibrium price of computers to drop but have an uncertain effect on equilibrium quantity.

Answer: FALSE

Diff: 3

Topic: Simultaneous change in supply and demand

82) Assume a national brewing company loses market share to a lower-priced competitor. Assume also that the company's workers go on strike and are able to negotiate a hefty wage increase. As such, we can conclude, with certainty, that the combination of these two changes would cause the equilibrium price and quantity of the company's product to decrease.

Answer: FALSE

Diff: 3

Topic: Simultaneous change in supply and demand

83) Because unemployment is a macroeconomic topic, an increase in unemployment would not be expected to have any impact on the equilibrium price or quantity in the market for an individual good.

Answer: FALSE

Diff: 2

Topic: Change in demand and market equilibrium

84) An increase in the availability of health insurance could be expected to cause the average price of health care to increase.

Answer: TRUE

Diff: 2

Topic: Change in demand and market equilibrium

85) Assume the demand and supply functions for good X can be written as

$$Q_d = 1000 - 40P_x$$

$$Q_s = -200 + 20P_x$$

In this example, equilibrium price is \$20 and the equilibrium quantity is 200.

Answer: TRUE

Diff: 2

Topic: Calculating market equilibrium

86) Define the concept of demand and explain, on an intuitive level, why the demand curve for a good is downward sloping.

Answer: Demand refers to relationship between the price of a good and the quantity consumers are willing and able to buy at each price. It is assumed that there is an inverse relationship between price and quantity demanded. The intuitive explanation is that as the price of a good falls, consumers' purchasing power increases. At the same time, the good becomes cheaper relative to its substitutes. For these reasons, consumers are willing to buy more of the good.

Diff: 2

Topic: Definition of demand

87) Distinguish between "a change in demand" and "a change in quantity demanded." What are the causes of each type of change and how do we illustrate them graphically?

Answer: A "change in demand" refers to a shift of the entire demand curve. It is caused by a change in a determinant of demand other than the price of the good in question. A change in quantity demanded refers to a movement along the demand curve for a good. It is caused by a change in the price of the good in question.

Diff: 1

Topic: Change in demand versus change in quantity demanded

88) List the factors that influence supply. How does a change in each of the factors you have listed affect the supply curve?

Answer: The factors that influence the supply of a good include the price of the good, input prices, technology, prices of related goods, producers' expectations, and the number of sellers. A change in price causes a movement along the supply curve for the good. A change in any of the other determinants of supply would cause the entire supply curve to shift. The direction of the shift depends on the specific change in question.

Diff: 1

Topic: Factors influencing supply

89) Assume the current price of good X is too high, i.e., it is above the equilibrium price.

Describe the changes that would occur in a market as a result, i.e., explain how the market would adjust to equilibrium.

Answer: The fact that the current price is too high would mean that there is a surplus of good X. Suppliers would respond by decreasing the price of the good and, as a result, quantity supplied. The decrease in price would also cause quantity demanded to increase until the surplus (excess supply) was eliminated.

Diff: 2

Topic: Market shortage and adjustment to equilibrium

90) Assume there is an increase in the price of electricity (which is the result of a decrease in the supply of electricity), and electricity and natural gas are substitutes. How would this affect the demand for natural gas, and what would happen to the equilibrium price and quantity of natural gas?

Answer: The increase in the price of electricity would cause the quantity demanded, as well as the equilibrium quantity of electricity, to decrease. Because electricity and natural gas are substitutes, the increase in the price of electricity and corresponding decrease in quantity would cause an increase in the demand for natural gas. The increase in the demand for natural gas would cause the equilibrium price and quantity of natural gas to increase as well.

Diff: 3

Topic: Complements, price changes and market equilibrium

91) "In the past five years the average price of our Chevrolets has risen about 6 percent a year, and each year we have sold 10 percent more cars than the previous year." How can this car dealer sell more cars as the price of the cars increases?

Answer: All else constant, an increase in demand will lead to both an increase in price and an increase in the quantity of cars sold. Alternatively, so long as demand increases by more than supply decreases, price and quantity exchanged will both increase.

Diff: 3

Topic: Increases in demand and supply over time

92) Using a change in supply and/or demand, explain the following phenomena:

- a. All else constant, gasoline prices are higher in summer than winter months.
- b. At the same time that the quality of personal computers has been increasing, the price of personal computers has been falling.

Answer:

- a. Demand for travel is higher in summer than winter months, which causes the demand for gasoline to be higher as well.
- b. Supply (and quality) have increased as a result of technology improvements, while demand has not increased as rapidly, putting downward pressure on price.

Diff: 2

Topic: Changes in supply or demand and market equilibrium

93) The demand and supply functions for sweatshirts (the basic grey kind) are as follows:

Demand		Supply	
	Quantity Demanded		Quantity Supplied
<u>Price</u>	<u>(per period)</u>	<u>Price</u>	<u>(per period)</u>
\$10	15,000	\$10	22,000
9	15,500	9	19,000
8	16,000	8	16,000
7	16,500	7	13,000
6	17,000	6	10,000
5	17,500	5	7,000
4	18,000	4	4,000
3	18,500	3	1,000
2	19,000	2	0

- Graph the demand and supply functions for sweatshirts and find the equilibrium price and quantity.
- What effect will an increase in the price of gym shoes (a complement) have on the equilibrium price and quantity of sweatshirts, all else constant? Illustrate the effect using your graph.
- What effect will a wage increase for workers in the sweatshirt industry have on the equilibrium price and quantity of sweatshirts, all else constant? Illustrate the effect using your graph.

Answer:

- Equilibrium price and quantity are \$8 and 16,000 units.
- An increase in the price of gym shoes will cause the demand for sweatshirts to decrease, i.e., the demand curve for sweatshirts will shift left. The decrease in demand will result in a decrease in the equilibrium price and quantity of sweatshirts.
- An increase in the wages of workers in the sweatshirt industry will lead to a decrease in the supply of sweatshirts, i.e., the supply curve will shift left. This will result in an increase in equilibrium price and a decrease in equilibrium quantity.

Diff: 2

Topic: Equilibrium, changes in the prices of related goods, change

94) The demand and supply functions for sweatshirts (the basic grey kind) are as follows:

Demand		Supply	
<u>Price</u>	<u>Quantity Demanded (per period)</u>	<u>Price</u>	<u>Quantity Supplied (per period)</u>
\$10	15,000	\$10	22,000
9	15,500	9	19,000
8	16,000	8	16,000
7	16,500	7	13,000
6	17,000	6	10,000
5	17,500	5	7,000
4	18,000	4	4,000
3	18,500	3	1,000
2	19,000	2	0

The equations for the demand and supply functions above are as follows:

$$Q_d = 20,000 - 500P$$

$$Q_s = -8,000 + 3000P$$

a. Solve for the equilibrium price and quantity. (Hint: at equilibrium, quantity supplied equals quantity demanded.)

b. Assume the supply function changes to:

$$Q_s = -5,000 + 3000P$$

Does supply increase or decrease? What is the new equilibrium price and quantity?

Answer:

a. Set the equations equal to each other: $20,000 - 500P = -8,000 + 3000P$ and solve for P. Then use either equation and the equilibrium value of P to solve for equilibrium Q. Equilibrium P and Q are \$8 and 16,000 units.

b. The change in the intercept of the supply function implies that supply has increased, i.e., the supply curve has shifted right. The new equilibrium price and quantity are (approximately) \$7.14 and 16,420 units.

Diff: 2

Topic: Calculating market equilibrium, change in supply and market