File: Ch02, Chapter 2: Supply and Demand Analysis

Multiple Choice

1. A relationship that shows the quantity of goods that consumers are willing to buy at different prices is the
   a) elasticity
   b) market demand curve
   c) market supply curve
   d) market equilibrium

2. The law of demand states :
   a) that price and quantity demanded are inversely related.
   b) that price and quantity demanded are inversely related, holding all other factors that influence demand fixed.
   c) that demand for a good comes from the desire of buyers to directly consume the good itself.
   d) an increase in demand results in an increase in price.

3. Which of the following statements best illustrates the law of demand?
   a) When the price of pepperoni rises, the demand for pizza falls.
   b) When the weather gets hotter, the quantity demanded of ice cream rises.
   c) When the price of lemons falls, the demand for lemonade rises.
   d) When the price of eggs rises, the quantity demanded of eggs falls.

4. Which of the following is *not* typically a factor held constant when deriving a demand curve for clothing?
   a) consumer income.
   b) the price of clothing.
   c) the price of other goods.
   d) consumer tastes.

5. What is the difference between a derived demand curve and a direct demand curve?
   a) Derived demand is unknown, whereas direct demand is known.
   b) Derived demand is unobservable, whereas direct demand is observable.
   c) Derived demand is demand determined by the demand for another good, whereas direct demand is demand for a good itself.
   d) Derived and direct demand are both terms referring to the same thing.

6. What is the quantity of televisions demanded per year when the average price of a television is $100 per unit and the demand curve for televisions is represented by $Q^d = 3.5million - 5000P$?
   a) 2.5 million televisions
   b) 3.0 million televisions
   c) 3.2 million televisions
   d) 4.0 million televisions

7. The linear demand curve is represented by the equation
   a) $P=Q - aP$
   b) $Q=a - bP$
   c) $Q=a - bP^2$
   d) $Q = AP^{-b}$

8. Which of the following statements best illustrates the law of supply?
   a) When the price of oil rises, the supply of automobiles falls.
   b) When the price of steel falls, the supply of automobiles rises.
   c) When the price of computers rises, the quantity supplied of computers rises.
   d) When the price of televisions rises, the quantity supplied of televisions falls.

9. A curve that shows us the total quantity of goods that their suppliers are willing to sell at different prices is
   a) Market supply curve
   b) Law of supply
   c) Demand curve

d) Market demand curve

10. Which of the following is *not* a factor held constant when deriving a supply curve for ski boots?
    a) The price of ski lift tickets.
    b) The price of ski boots.
    c) The wages of workers who make ski boots.
    d) The price of skis.

11. Suppose in a market with $Q^d = 100 - 5P$ and $Q^s = 5P$, the government imposes a price floor of $15. If the government is required to purchase any excess supply at the price floor, how much will the government have to pay to purchase the excess in this market?
    a) Nothing; there is no surplus
    b) $1,000
    c) $1,500
    d) $750

12. Suppose that the supply of apples can be represented by the following equation: $Q^s = 2P + 500$. Further suppose that the demand for apples can be represented by the following equation: $Q^d = 900 - 3P$. Which of the following is the equilibrium price in the market for apples?
    a) 10
    b) 50
    c) 80
    d) 100

13. Suppose demand is given by $Q^d = 500 - 15P$ and supply is given by $Q^s = 5P$. If the government imposes a $15 price ceiling, the excess demand will be
    a) 200
    b) 225
    c) 250
    d) 275

14. Suppose demand is given by $Q^d = 400 – 15P + I$, where Q^d is quantity demanded, P is price and I is income. Supply is given by $Q^s = 5P$, where Q^s is quantity supplied. When $I = 200$, equilibrium price is
    a) 15
    b) 20
    c) 25
    d) 30

15. Suppose demand is given by $Q^d = 500 – 15P$ and supply is given by $Q^s = 5P$. If the government imposes a $30 price floor, the excess supply will be
    a) 25
    b) 50
    c) 100
    d) 150

16. Suppose demand is given by $Q^d = 400 – 15P + I$, where Q^d is quantity demanded, P is price and I is income. Supply is given by $Q^s = 5P$, where Q^s is quantity supplied. When $I = 100$, equilibrium price is
    a) 15
    b) 20
    c) 25
    d) 30

17. Which of the following would cause an unambiguous decrease in the equilibrium quantity in a market?
    a) a rightward shift in supply and a rightward shift in demand.
    b) a rightward shift in supply and a leftward shift in demand.
    c) a leftward shift in supply and a rightward shift in demand.
    d) a leftward shift in supply and a leftward shift in demand.

18. Factors that could cause a supply curve to shift to the right include all of the following except

a) a drop in the price of inputs to the supply process.
b) an increase in the number of firms in the industry.
c) an increase in demand for the product.
d) a technological innovation that makes it cheaper to produce the product.

19. Factors that could cause a demand curve to shift to the left include all of the following except
a) a change in preferences away from the product in question.
b) an increase in the price of substitute products.
c) a growing awareness of a health risk associated with the product.
d) a decrease in the general level of income in the country.

20. Suppose that the market for computers is initially in equilibrium. Further suppose that there is an increase in the price of computer software. Which of the following accurately describes the new equilibrium in the computer market?
a) The equilibrium price will rise; the equilibrium quantity will fall.
b) The equilibrium price will rise; the equilibrium quantity will rise.
c) The equilibrium price will fall; the equilibrium quantity will fall.
d) The equilibrium price will fall; the equilibrium quantity will rise.

21. Suppose that the market for soybeans is initially in equilibrium. Further suppose that there is a decrease in the price of fertilizer. Which of the following accurately describes the new equilibrium?
a) The equilibrium price will rise; the equilibrium quantity will fall.
b) The equilibrium price will rise; the equilibrium quantity will rise.
c) The equilibrium price will fall; the equilibrium quantity will fall.
d) The equilibrium price will fall; the equilibrium quantity will rise.

22. Suppose that the market for newspaper is initially in equilibrium. Further suppose that there is both an increase in the price of ink and a decrease in the price of magazines, which people may read in place of a newspaper. Which of the following accurately describes the new equilibrium?
a) The equilibrium price will rise; the equilibrium quantity is ambiguous.
b) The equilibrium price is ambiguous; the equilibrium quantity will fall.

c) The equilibrium price will fall; the equilibrium quantity is ambiguous.
d) The equilibrium price is ambiguous; the equilibrium quantity will rise.

23. A higher consumer income increases the demand for a particular good. The effect of this income on market demand usually is illustrated by
a) a rightward shift in the demand curve
b) a leftward shift in the demand curve
c) a rightward movement along the demand curve
d) a leftward movement along the demand curve.

24. Consider the demand curve $Q^d = 1000 - 20P - 6r$. If the value of r falls, the demand curve will
a) shift to the left
b) shift to the right
c) remain unchanged
d) rotate along the quantity axis

25. Consider the demand curve $Q^d = 40 - 2P + 6i$. If the value of i rises, the demand curve will
a) not shift at all
b) shift to the right
c) shift to the left
d) rotate so it becomes upward sloping

26. Consider the supply curve $Q^s = 40 + 2P + 6i$. If the value of i rises, the supply curve will
a) not shift at all
b) shift to the right
c) shift to the left
d) rotate so it becomes upward sloping

27. Which of the following would cause an unambiguous increase in the equilibrium price in a market?
    a) a rightward shift in supply and a rightward shift in demand.
    b) a rightward shift in supply and a leftward shift in demand.
    c) a leftward shift in supply and a rightward shift in demand.
    d) a leftward shift in supply and a leftward shift in demand.

28. A simultaneous shift to the right of both supply and demand will
    a) increase the equilibrium price
    b) decrease the equilibrium price
    c) increase the equilibrium quantity
    d) decrease the equilibrium quantity

29. Which of the following is False?
    a) Rightward shift in demand + unchanged supply curve = higher equilibrium price and larger equilibrium quantity
    b) Rightward shift in demand + Rightward shift in supply curve = lower equilibrium price and smaller equilibrium quantity
    c) Leftward shift in supply + unchanged demand curve = higher equilibrium price and smaller equilibrium quantity
    d) Leftward shift in demand + unchanged supply curve = lower equilibrium price and smaller equilibrium quantity
    e) Rightward shift in supply + unchanged demand curve = lower equilibrium price and larger equilibrium quantity

Multiple Choice

32. A measure of the rate of percentage change of quantity demanded with respect to price, holding all other determinants of demand constant is
    a) Price elasticity of market equilibrium
    b) Price elasticity of demand
    c) Price elasticity of supply

d) Price elasticity equilibrium

33. Price elasticity of demand measures
a) the shift in demand as price changes.
b) the sensitivity of quantity demanded to price.
c) the slope of the demand curve.
d) the relationship of percentages to price.

34. Consider the supply curve $Q^s = 2P$ and the demand curve $Q^d = 90 - P$. Which expression best shows how you would calculate the elasticity of demand when P increases by 1 along the demand curve from its equilibrium value?
a) [(59 – 60)/ (31 – 30)] x (30/60)
b) [(56 – 60)/ (31 – 30)] x (30/60)
c) [(59 – 61)/ (31 – 30)] x (30/60)
d) [(59 – 62)/ (32 – 30)] x (30/60)

35. Eggs would typically have a
a) low elasticity of demand, probably between -1 and -2
b) low elasticity of demand, probably between 0 and -1
c) high elasticity of demand , probably between -2 and -3
d) low elasticity of demand, probably between -2 and -3

36. Please match the classification to the meaning

a	Perfectly inelastic demand	1	Price elasticity of demand equal to -1
b	Inelastic demand	2	Price elasticity of demand between -1 and - ∞
c	Unitary elastic demand	3	Price elasticity of demand between 0 and -1
d	Elastic demand	4	Price elasticity of demand equal to 0
e	Perfectly elastic demand	5	Price elasticity of demand equal to - ∞

37. Suppose that when the price of a good is $15, the quantity demanded is 40 units, and when the price falls to $6, the quantity increases to 60 units. The price elasticity of demand near a price of $6 and a quantity of 60 can be calculated as:
    a) –5/6
    b) –2
    c) –2/9
    d) –9/2

38. Suppose that demand is linear, $Q^d = 100 - 12P$. At $P = 5$ and $Q = 40$, the price elasticity of demand is:
    a) –2/3
    b) –2
    c) –12
    d) –3/2

39. The choke price is
    a) the price at which quantity supplied falls to zero.
    b) the price at which quantity demanded falls to zero.
    c) the price at which quantity supplied is maximized.
    d) the price at which quantity demanded is maximized.

40. Suppose we postulate a linear demand curve $Q^d = a - bP$ and observe, through supply shifts, two points on the demand curve. At point A, $P_A = 2$ and $Q^d_A = 6$. At point B, $P_B = 4$ and $Q^d_B = 2$. The choke price for this demand curve is
    a) 10
    b) 2
    c) 5
    d) –2

41. Suppose demand is given by $Q^d = 1000 - 25P$ and supply is given by $Q^s = 75P$. At the equilibrium price and quantity, the price elasticity of demand is
    a) –3
    b) –25
    c) –1/3

d) –10

42. Along a linear demand curve, as price falls,
a) the price elasticity of demand is constant, but the slope of demand falls.
b) the price elasticity of demand approaches zero, but the slope is constant.
c) the price elasticity of demand moves away from zero.
d) the price elasticity is the same as the slope of the demand curve.

43. The constant elasticity demand curve is represented by the equation
a) $P = Q - aP$
b) $Q = a - bP$
c) $Q = a - bP^2$
d) $Q = AP^{-b}$

44. Consider the demand curve $Q^d = 5P^{-1}$. The elasticity of demand along this demand curve
a) is inelastic
b) is elastic
c) is unitary elastic
d) falls as the price falls

45. Consider the demand curve $Q^d = 500P^{-2}$.(是负几次方，弹性就是多少) If the price is 1, the elasticity of demand is
a) –0.50
b) –2
c) 500
d) –500

46. If demand is elastic, an increase in price
a) will increase total revenue
b) will decrease total revenue

c) will have an indeterminate effect on total revenue
d) will decrease total profit

47. Of the following choices, which good should have the most inelastic price elasticity of demand?
a) Gasoline to a car owner.
b) Cigarettes to a smoker.
c) Insulin to an insulin-dependent diabetic.
d) Apples to a vegetarian.

48. Identify the truthfulness of the following statements.
I. Demand tends to be more price inelastic when few substitutes for a product exist.
II. Demand tends to be more price elastic when a consumer's expenditure on the product is small.

a) Both I and II are true.
b) Both I and II are false.
c) I is true; II is false.
d) I is false; II is true.

53. An income elasticity of demand for milk of 0.1 could mean that
e) as income rises by 10 percent, quantity demanded rises by 1 percent.
f) as income rises by 100 percent, quantity demanded rises by 1 percent.
g) as income rises by 20 percent, quantity demanded rises by 10 percent.
h) as income rises by 50 percent, quantity demanded rises by 25 percent.

54. Income elasticity of demand measures the responsiveness of quantity demanded to changes in
a) price.
b) income.
c) demand substitutes.
d) demand complements.

55. A cross price elasticity of demand for product A with respect to the price of product B of 0.3 means that
    a) an increase in the price of A by 10 percent gives rise to an increase in quantity demanded of B by 3 percent.
    b) an increase in the price of B by 10 percent gives rise to an increase in the quantity demanded of A by 3 percent.
    c) an increase in the price of B by 10 percent gives rise to a decrease in the quantity demanded of A by 3 percent.
    d) an increase in the price of A by 10 percent gives rise to a decrease in the quantity demanded of B by 3 percent.

56. Suppose the cross-price elasticity for two goods is negative. The two goods are
    a) normal goods
    b) substitutes
    c) complements
    d) inferior goods

57. Which of the following statements is true?
    a) The price elasticity of demand is positive when there is an inverse relationship between price and quantity demanded.
    b) A positive income elasticity indicates that demand for a good rises as consumer income falls.
    c) A positive cross-price elasticity for two goods A and B would arise if A and B were demand complements.
    d) A negative cross-price elasticity for two goods A and B would arise if A and B were demand complements.

58. Suppose the cross-price elasticity for two goods is positive. The two goods are
    a) normal goods
    b) substitutes
    c) complements
    d) inferior goods

59. All else equal, an increase in the price of bicycle helmets, would tend to
    a) reduce the demand for cars
    b) increase the demand for bicycles
    c) reduce the demand for bicycles
    d) cause more riders to walk to work.

60. Why are long-run demand curves likely to be more elastic than short-run demand curves?
    a) Prices tend to rise in the long-run.
    b) Prices tend to be stable in the long-run.
    c) Consumers have more time to adjust their purchase decisions in response to a change in price.
    d) Supply tends to adjust in the long run.

61. Which of the following statements best describes the relationship between short-run supply elasticity and long-run supply elasticity?
    a) For many products, long-run supply is likely to be more price elastic than short-run supply.
    b) For products that can be recycled, long-run supply is likely to be more price elastic than short-run supply.
    c) For many products, long-run supply is likely to be less price elastic than short-run supply.
    d) Both a) and b) are generally true, but c) is generally false.

62. Gasoline in the long run will generally exhibit
    a) greater elasticity of demand than in the short run.
    b) greater elasticity of demand that for jewelry.
    c) less elasticity of demand than in the short run.
    d) less elasticity of demand than with regard to insulin for diabetics.

63. Which of the following statements best describes the relationship between short-run demand elasticity and long-run demand elasticity?

a) For many products, long-run demand is likely to be more price elastic than short-run demand.
b) For durable goods, long-run demand is likely to be more price elastic than short-run demand.
c) For many products, long-run demand is likely to be more price inelastic than short-run demand.
d) For most products, long-run and short-run demand elasticities are the same.

64. Which of the following explanations supports the statement that long-run supply curves are likely to be more elastic than short-run supply curves?
a) Firms are able to adjust fixed inputs in the long-run but not in the short-run.
b) Firms are able to adjust variable inputs in the short-run.
c) Firms prefer to hire workers rather than capital.
d) Firms have more flexibility in the short-run.

65. Let the price elasticity of demand for a soft drink be – 2. In the year 2005, the per capita consumption of soft drinks was about 500 cans per person, and the average price was $1.00 per can. If we suppose that demand for the soft drink is linear, $Q^d = a - bP$, where a and b are constants, Q^d is quantity demanded and P is price, an estimate of the demand equation could be:
a) $Q^d = 100 - 2P$
b) $Q^d = 1500 - 2P$
c) $Q^d = 1500 - 1000P$
d) $Q^d = 1000 - 1500P$

66. To identify a demand curve we must observe
a) many years of data.
b) shifts in the demand curve.
c) shifts in the supply curve.
d) many different markets simultaneously.

67. Consider the following demand and supply curves: $Q^d = 100 - 2P$, and $Q^s = \frac{1}{2} P$, calculate the equilibrium P and Q for this initial situation and assuming the supply curve changes to $Q^s = \frac{1}{2} P + 10$. Which of the following is correct?

a) the initial equilibrium is $P = 40$, $Q = 20$ and the supply curve shifts left.
b) the initial equilibrium is $P = 40$, $Q = 20$ and the new equilibrium is $P = 36$, $Q = 28$.
c) the initial equilibrium is $P = 40$, $Q = 20$ and the new equilibrium remains the same.
d) the initial equilibrium is $P = 40$, $Q = 20$ and the new equilibrium is $P = 38$, $Q = 28$.

68. Consider the following demand and supply curves: $Q^d = 100 - 2P$, and $Q^s = ½ P$, calculate the equilibrium P and Q for this initial situation and assuming the demand curve changes to $Q^d = 100 - P$. Which of the following is correct?
a) the initial equilibrium is $P = 40$, $Q = 20$ and the demand curve shifts left.
b) the initial equilibrium is $P = 40$, $Q = 20$ and the new equilibrium is $P = 36$, $Q = 28$.
c) the initial equilibrium is $P = 40$, $Q = 20$ and the new equilibrium is $P = 66\ 2/3$ and $Q = 33\ 1/3$.
d) the initial equilibrium is $P = 40$, $Q = 20$ and the demand curve shifts right.

69. Suppose that demand and supply in the market for Brazil nuts is linear, with a historic market price of $.50 per pound and 10 million pounds sold. In 2004, a news item raised health fears about the nuts. That year, the market price fell to $.45 per pound and only 8 million pounds traded. An estimate for the equation of the supply of Brazil nuts (where Q^S is in millions of pounds and P is in dollars) would be:
a) This information only relates to demand, and so cannot be used to generate a supply equation.
b) $Q^s = 30 + 40P$
c) $Q^s = 40P$
d) $Q^s = -10 + 40P$

