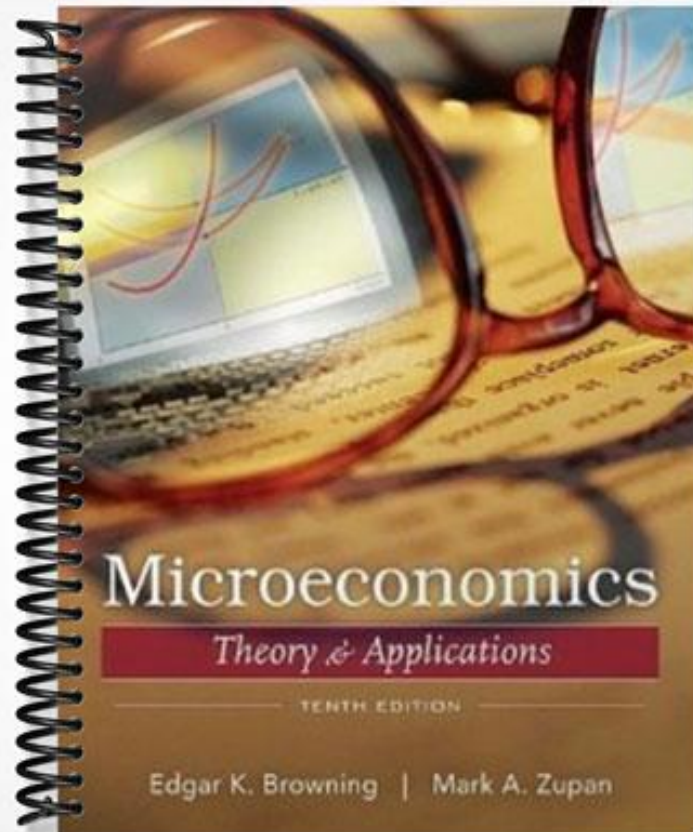


TEST BANK



Microeconomics

Theory & Applications

TENTH EDITION

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File: Ch02, Chapter 2: Supply and Demand

1. A rise in the quantity demanded of lemons can be attributed to
- A) a leftward shift in the supply curve of lemons.
 - B) a lower price.
 - C) a decline in the number of people drinking lemonade.
 - D) a decrease in the price of limes.

Ans: A

Difficulty: E

Source: 2-1

Page: 16

Type: A

2. A supply curve for a good shows the
- A) maximum quantities sellers are willing to offer for sale at alternative prices.
 - B) maximum quantities that can be produced at alternative prices.
 - C) quantities sellers will offer as their production costs change.
 - D) quantities sellers can legally supply.

Ans: A

Difficulty: E

Source: 2-1

Page: 20

Type: F

3. If the American Bar Association wanted to increase the income of lawyers, it should
- A) lobby Congress to subsidize loans for law students.
 - B) encourage people to plead their own cases.
 - C) make the bar examination more difficult.
 - D) try to reduce the variety of cases subject to litigation.

Ans: C

Difficulty: E

Source: 2-1

Page: 21

Type: A

4. Which of the following statements is not true about a demand curve?

- A) The demand curve shows the maximum price consumers will pay for various quantities of a product.
- B) Movements along a demand curve reflect changes in consumers' tastes.
- C) The demand curve shows the quantities consumers will purchase at various prices.
- D) Increased consumption at lower prices generally results from an increase in available resources used to produce the good.

Ans: B

Difficulty: E

Source: 2-1

Page: 17

Type: F

5. A shift in the consumer's demand for a good X cannot result from a change in the

- A) price of a substitute good for X.
- B) price of X.
- C) consumer's tastes.
- D) consumer's income.

Ans: B

Difficulty: E

Source: 2-1

Page: 18

Type: F

6. An increase in the quantity supplied

- A) shifts the supply curve to the right.
- B) shifts the supply curve to the left.
- C) indicates a movement along the supply curve.
- D) makes the supply curve flatter.

Ans: C

Difficulty: E

Source: 2-1

Page: 21

Type: F

7. As the price of shirts rises, the law of supply would predict a(n):

- A) increase in the quantity of shirts supplied.
- B) decrease in the quantity of shirts supplied.
- C) increase in the supply of shirts.
- D) decrease in the supply of shirts.

Ans: A

Difficulty: E

Source: 2-1

Page: 21

Type: F

8. "If, at the initial price, there is excess demand, the price will rise. As a consequence, the demand curve shifts down since people buy less at a higher price, and the supply curve shifts up because producers find it profitable to supply more output at a higher price. Price will continue to adjust until there is no excess demand." Which of the following is true about this statement?

- A) The quotation is correct.
- B) The quotation confuses excess supply with excess demand.
- C) The quotation confuses movements along curves with shifts in curves.
- D) The quotation confuses short-run adjustments with long-run adjustments.

Ans: C

Difficulty: M

Source: 2-1

Page: 19

Type: A

9. An excess demand for a good or service tends to cause

- A) its price to increase over time.
- B) its price to decrease over time.
- C) an offsetting excess supply later.
- D) none of the above

Ans: A

Difficulty: M

Source: 2-2

Page: 23

Type: F

10. When the actual price in a market is above the equilibrium price we would expect

- A) equilibrium price and quantity to prevail.
- B) a shortage of the good or service.
- C) a surplus of the good or service.
- D) an excess demand or excess supply depending upon the extent of the difference between actual and equilibrium price.

Ans: C

Difficulty: M

Source: 2-2

Page: 24

Type: F

11. An excess supply for a product indicates the price is
- A) below the equilibrium price.
 - B) above the equilibrium price.
 - C) a money price instead of a relative price.
 - D) either above or below the equilibrium price. More information is needed.

Ans: B

Difficulty: M

Source: 2-2

Page: 24

Type: F

12. An excess demand for a product indicates the price is
- A) below the equilibrium price.
 - B) above the equilibrium price.
 - C) a money price instead of a relative price.
 - D) either above or below the equilibrium price. More information is needed.

Ans: A

Difficulty: M

Source: 2-2

Page: 23

Type: F

13. If both supply and demand for a good increase at the same time, which of the following must also increase?
- A) the equilibrium price
 - B) the use of substitutes

- C) the equilibrium quantity
- D) all of the above

Ans: C

Difficulty: M

Source: 2-3

Page: 24

Type: F

14. An increase in supply, other things equal, causes
- A) equilibrium price to fall and the equilibrium quantity to rise.
 - B) equilibrium price and quantity to fall.
 - C) equilibrium price and quantity to rise.
 - D) equilibrium price to rise and the equilibrium quantity to rise.

Ans: A

Difficulty: M

Source: 2-3

Page: 25

Type: F

15. An increase in demand accompanied by a decrease in supply will generate
- A) a decrease in price and an increase in quantity.
 - B) an increase in price and an increase in quantity.
 - C) an increase in quantity and either an increase or decrease in price.
 - D) an increase in price and either an increase or decrease in quantity.

Ans: D

Difficulty: M

Source: 2-3

Page: 24

Type: F

16. If the average price of an automobile increased from \$7000 to \$8000 from 1979 to 1980, then we know that
- A) the relative price of autos increased.
 - B) the money price of autos increased but the relative price fell.
 - C) the absolute price of autos increased but we do not have enough information to say what happened to relative prices.

D) the demand for autos increased.

Ans: C

Difficulty: D

Source: 2-3

Page: 24

Type: F

17. A local businessman points out that, as the price of VCRs has fallen, sales have increased tremendously. The businessman cites this example as proof that the law of supply doesn't hold. Which of the following explanations best solves the paradox cited by the businessman?

A) Demand was decreasing during the period in question.

B) Demand was increasing during the period in question.

C) Supply was decreasing during the period in question.

D) Supply was increasing during the period in question.

Ans: D

Difficulty: D

Source: 2-3

Page: 24

Type: A

18. When demand decreases and supply is vertical we can conclude that

A) both price and quantity will rise.

B) price will fall while quantity remains constant.

C) quantity will rise while price remains constant.

D) neither price nor quantity will change.

Ans: B

Difficulty: M

Source: 2-3

Page: 26

Type: F

19. If a price ceiling is imposed and the quantity demanded exceeds the quantity supplied, which of the following is not likely to occur?

A) nonprice rationing

B) black markets

C) increased production

D) quality deterioration

Ans: C

Difficulty: M

Source: 2-4

Page: 29

Type: F

20. Suppose a vaccine for the common cold is discovered. Although the government begins producing the vaccine in as large a volume as possible, there is not enough vaccine available to meet demand. Consequently, the government must also set up an allocation scheme to control the vaccine's distribution. Which of the following is true about the price of the vaccine?

A) It was above equilibrium.

B) It was below equilibrium.

C) It was at equilibrium.

D) Nothing can be determined from the information given.

Ans: B

Difficulty: M

Source: 2-4

Page: 29

Type: A

21. Price ceilings are often associated with

A) price rationing.

B) quality deterioration.

C) quality enhancement.

D) excess supplies.

Ans: B

Difficulty: M

Source: 2-4

Page: 29

Type: F

22. Which of the following statements is true with respect to price ceilings?

A) The true cost of the good to consumers is usually greater than the money cost.

B) All consumers benefit from the lower price.

C) Nonprice rationing associated with price controls is more efficient than rationing by price.

D) Shortages associated with price ceilings generally do not last any longer than shortages

associated with free markets.

Ans: A
Difficulty: M
Source: 2-4
Page: 30
Type: A

23. Farmers could increase their incomes

- A) if they can get the government to establish minimum agricultural prices above the equilibrium price when demand is inelastic.
- B) if they can get the government to establish price ceilings on agricultural products.
- C) by getting government out of agricultural price-setting and relying on free markets.
- D) none of the above is likely to be effective

Ans: A
Difficulty: M
Source: 2-4
Page: 31
Type: A

24. All of the following are common responses to a price ceiling except

- A) an excess supply.
- B) nonprice rationing.
- C) quality deterioration.
- D) black markets.

Ans: A
Difficulty: M
Source: 2-4
Page: 30
Type: F

25. When the government establishes a price ceiling below the equilibrium price

- A) there will be a temporary shortage that market forces will eventually clear.
- B) a shortage occurs which market forces can not clear.
- C) producers will eliminate the resulting shortage by jointly deciding to increase supply.
- D) the market equilibrium price will prevail.

Ans: B

Difficulty: M
Source: 2-4
Page: 30
Type: F

26. Which of the following is not likely to result from the imposition of a price ceiling below the equilibrium price?

- A) some form of non-price rationing.
- B) a shortage that market forces cannot be expected to eliminate.
- C) improvements in product quality.
- D) lines forming to obtain some of the good

Ans: C
Difficulty: M
Source: 2-4
Page: 30
Type: F

27. The price elasticity of demand for a good is equal to

- A) the percentage change in quantity divided by the percentage change in price.
- B) the percentage change in price divided by the percentage change in quantity.
- C) the percentage change in quantity divided by the change in price.
- D) the percentage change in price divided by the percentage change in quantity demanded.

Ans: A
Difficulty: M
Source: 2-5
Page: 34
Type: F

28. Which of the following statements about demand elasticity is correct?

- A) If demand is price-inelastic, an increase in price will reduce total expenditures.
- B) If demand is price-elastic, an increase in price will increase total expenditures.
- C) If demand is price-inelastic, an increase in price will increase total expenditures.
- D) If demand is price-elastic, an increase in price will leave total revenues unchanged.

Ans: C
Difficulty: M
Source: 2-5
Page: 34

Type: F

29. Along a linear demand curve, the price elasticity

- A) is constant.
- B) increases as price falls.
- C) is equal to one at the midpoint.
- D) decreases as price rises.

Ans: C

Difficulty: M

Source: 2-5

Page: 35

Type: F

30. If the price elasticity of demand for X is greater than one,

- A) an increase in supply will increase total revenues.
- B) a decrease in supply will increase total revenues.
- C) a price ceiling that lowers price below the equilibrium price will increase total consumer outlays.
- D) a price floor that raises price above the equilibrium will increase total consumer outlays.

Ans: C

Difficulty: M

Source: 2-5

Page: 35

Type: F

31. For a crop-reduction program for corn to raise farmers' incomes, the demand for that crop must be

- A) elastic.
- B) inelastic.
- C) unitary-elastic.
- D) infinitely-elastic.

Ans: B

Difficulty: M

Source: 2-5

Page: 35

Type: A

32. An elasticity of 0.2 indicates that a 1 percent increase in price leads to a
- A) 2 percent decrease in quantity demanded.
 - B) 20 percent decrease in quantity demanded.
 - C) 0.2 percent decrease in quantity demanded.
 - D) 0.2 percent increase in quantity demanded.

Ans: C

Difficulty: E

Source: 2-5

Page: 34

Type: F

33. If price changes from \$4.75 to \$5.25 and quantity demanded changes from 1025 to 975 units, then the price elasticity of demand is approximately
- A) 4.0.
 - B) 0.5.
 - C) 0.25
 - D) 2.2.

Ans: B

Difficulty: M

Source: 2-5

Page: 36

Type: F

34. Along a linear demand curve, elasticity
- A) increases as price falls.
 - B) is independent of price.
 - C) decreases as price falls.
 - D) is constant since the slope is constant.

Ans: C

Difficulty: M

Source: 2-5

Page: 35

Type: F

35. Elasticity of demand tends to be greater
- A) the longer the time period involved.
 - B) the more complements the good has.
 - C) the lower the income elasticity of demand.
 - D) the more widely defined the commodity class.

Ans: A

Difficulty: M

Source: 2-5

Page: 38

Type: F

36. The income elasticity of demand for an inferior good
- A) is negative.
 - B) is positive.
 - C) is zero.
 - D) depends on the price elasticity of demand.

Ans: A

Difficulty: M

Source: 2-5

Page: 40

Type: F

37. The cross-price elasticity of demand between substitutes
- A) is negative.
 - B) is positive.
 - C) is zero.
 - D) is negative if the price elasticity of each good is inelastic, but positive if the price elasticity of each good is elastic.

Ans: B

Difficulty: M

Source: 2-5

Page: 40

Type: F

38. At every point on an individual's demand curve, the height to the demand curve measures
- A) the quantity demanded of the good.
 - B) the marginal benefit of the good to the consumer.

- C) the real income of the consumer.
- D) all of the above

Ans: B

Difficulty: M

Source: 2-1

Page: 16

Type: F

39. The law of demand states that

- A) people demand high-quality goods.
- B) people buy larger quantities of a good at lower prices.
- C) people prefer more to less.
- D) people will pay any price for goods they need but not for goods they don't need.

Ans: B

Difficulty: E

Source: 2-1

Page: 16

Type: F

40. Which is a valid interpretation of the demand curve? The demand curve identifies

- A) the quantities purchased at various prices.
- B) the price that consumers will pay for various quantities.
- C) both (A) and (B)
- D) neither (A) nor (B)

Ans: C

Difficulty: M

Source: 2-1

Page: 17

Type: F

41. The negative slope of the demand curve indicates that

- A) more consumers are willing to buy the good as the price falls.
- B) consumption per person increases as the price falls.
- C) both (A) and (B)
- D) neither (A) nor (B)

Ans: C

Difficulty: M
Source: 2-1
Page: 17
Type: F

42. The demand curve for water is downward sloping, indicating that
- A) there are an increasing number of reservoirs.
 - B) more consumers enter the market as the price falls.
 - C) there is more consumption per person at lower prices.
 - D) the production costs for water are very low.

Ans: C
Difficulty: M
Source: 2-1
Page: 17
Type: F

43. Which of the following violates the law of demand?
- A) After receiving a raise of \$10,000 a year, a young man buys more steak than before, even though the price of steak increased 5 percent.
 - B) A woman purchases more diapers after having a baby, even though the price of diapers increased.
 - C) After the price of bowling increases, a woman increases her frequency of bowling.
 - D) Despite butter being more expensive than margarine, a woman buys more butter after the price of margarine, a close substitute, increases.

Ans: C
Difficulty: M
Source: 2-1
Page: 17
Type: A

44. Consider two goods, X and Y. If the price of Y increases and, as a consequence, the demand curve for X shifts to the left, then
- A) X and Y are substitutes.
 - B) X and Y are complements.
 - C) X and Y are unrelated.
 - D) X and Y are

Ans: B

Difficulty: M
Source: 2-1
Page: 18
Type: F

45. An increase in quantity supplied occurs when
- A) there is technological advance.
 - B) the costs of production fall.
 - C) the price of the good increases.
 - D) the price of the good falls.

Ans: C
Difficulty: E
Source: 2-1
Page: 21
Type: F

46. An increase in supply occurs when
- A) there is technological advance.
 - B) the costs of production rise.
 - C) the price of the good increases.
 - D) the price of the good falls.

Ans: A
Difficulty: E
Source: 2-1
Page: 21
Type: F

47. When there is an excess supply for a good, there is
- A) downward pressure on price because firms hold out for the best price they can get.
 - B) downward pressure on price because firms accumulate unwanted inventories.
 - C) upward pressure on price because firms hold out for the best price they can get.
 - D) upward pressure on price because firms accumulate unwanted inventories.

Ans: B
Difficulty: M
Source: 2-2
Page: 22
Type: F

48. When there is an excess demand for a good, there is
- A) downward pressure on price because buyers are willing to pay more.
 - B) downward pressure on price because firms accumulate unwanted inventories.
 - C) upward pressure on price because buyers are willing to pay more.
 - D) upward pressure on price because firms accumulate unwanted inventories.

Ans: C

Difficulty: M

Source: 2-2

Page: 21

Type: F

49. Which of the following would result in a higher equilibrium price and an ambiguous change in equilibrium quantity?
- A) an increase in supply and demand.
 - B) an increase in supply and a decrease in demand.
 - C) a decrease in supply and demand.
 - D) a decrease in supply and an increase in demand.

Ans: A

Difficulty: M

Source: 2-3

Page: 24

Type: F

50. Which of the following would result in a higher equilibrium quantity and an ambiguous change in equilibrium price?
- A) an increase in supply and demand.
 - B) an increase in supply and a decrease in demand.
 - C) a decrease in supply and demand.
 - D) a decrease in supply and an increase in demand.

Ans: A

Difficulty: M

Source: 2-3

Page: 24

Type: F

51. The relative price of houses in the San Francisco Bay Area has risen dramatically in recent years because

- A) there has been an enormous increase in demand.
- B) there has been an enormous increase in supply.
- C) there has been an enormous increase in quantity demanded.
- D) there has been an enormous increase in quantity supplied.

Ans: A

Difficulty: E

Source: 2-4

Page: 25

Type: A

52. Universal “free” health care in Canada is a form of a

- A) price floor leading to lengthy delays before receiving treatment.
- B) price ceiling leading to lengthy delays before receiving treatment.
- C) price floor leading to shorter waiting times.
- D) price ceiling leading to shorter waiting times.

Ans: B

Difficulty: M

Source: 2-4

Page: 23

Type: A

53. If a higher price results in no change in total expenditure, then demand is

- A) elastic.
- B) inelastic.
- C) unit-elastic.
- D) not responsive to price changes at all.

Ans: C

Difficulty: M

Source: 2-5

Page: 34

Type: F

54. Which of the following is incorrect for a linear demand curve?

- A) The demand curve is more elastic at higher prices.

- B) The demand curve is less elastic at lower prices.
- C) Elasticity changes along the demand curve.
- D) Elasticity is constant along the demand curve.

Ans: D

Difficulty: M

Source: 2-5

Page: 35

Type: F

55. Suppose 100 pretzels are demanded at a given price. Using arc elasticity, if the price of pretzels rises by 5%, and the number of pretzels demanded falls to 92, then

- A) the demand for pretzels in the price range is elastic.
- B) the demand for pretzels in the price range is inelastic.
- C) the demand for pretzels in the price range is unit-elastic.
- D) the price elasticity of demand for pretzels is zero.

Ans: A

Difficulty: M

Source: 2-5

Page: 36

Type: A

56. If the cross-price elasticity of demand is 1.75, then the two goods are

- A) complements.
- B) substitutes.
- C) luxuries.
- D) inferior goods.

Ans: B

Difficulty: E

Source: 2-5

Page: 40

Type: F

57. If an increase in the price of oil from \$20 to \$24 per barrel induces firms to increase production from 1 million to 1.6 million barrels, then the arc elasticity of supply is

- A) 2.54
- B) 3
- C) 2.25

D) 2

Ans: A

Difficulty: M

Source: 2-5

Page: 41

Type: A

58. If income increases from \$20,000 to \$30,000 and the quantity of X demanded

A) increases, then X is normal.

B) increases, then X is inferior.

C) decreases, then X is normal.

D) decreases, then X is a luxury.

Ans: A

Difficulty: M

Source: 2-5

Page: 40

Type: A

59. For which one of the following would you expect to have the highest income elasticity of demand?

A) diamonds

B) water

C) pretzels

D) beer

Ans: A

Difficulty: M

Source: 2-5

Page: 40

Type: A

60. Typically, a firm will be more able to respond to changing prices for their product over

A) one week.

B) one month.

C) one year.

D) Time has no effect on a firm's ability to respond.

Ans: C

Difficulty: E
Source: 2-5
Page: 38
Type: F

61. If land use restrictions in major cities were relaxed, the
- A) supply of houses would decrease.
 - B) demand for houses would increase.
 - C) supply of houses would increase.
 - D) demand for houses would decrease.

Ans: C
Difficulty: E
Source: 2-3
Page: 24
Type: A

62. An expectation that the price of housing will increase more rapidly in coming years will cause the
- A) supply of houses today to decrease.
 - B) demand for houses today to increase.
 - C) supply of houses today to increase.
 - D) demand for houses today to decrease.

Ans: B
Difficulty: E
Source: 2-3
Page: 24
Type: A

63. Housing prices have increased substantially in recent years because
- A) many localities place severe restrictions on land use.
 - B) mortgage interest rates have been relatively high.
 - C) many families have been moving to less populated cities.
 - D) Home Depot has expanded very rapidly.

Ans: A
Difficulty: E
Source: 2-3
Page: 25

Type: A

64. Evidence suggests that Americans have been getting fatter because

- A) they are exercising less and expending fewer calories.
- B) they are eating more as a result of a lower supply of food.
- C) the real price of food has fallen leading to greater calorie intake.
- D) French fries are very tasty.

Ans: C

Difficulty: E

Source: 2-3

Page: 24

Type: A

65. For human organs, the U.S. has

- A) no formal policy.
- B) set a price floor of zero, which contributes to a severe shortage.
- C) set a price ceiling of \$3000, which alleviates the severe shortage.
- D) set a price ceiling of zero, which contributes to a severe shortage.

Ans: B

Difficulty: E

Source: 2-4

Page: 23

Type: F

66. For which one of the following is the demand curve most elastic.

- A) cigarettes
- B) Iams dog food
- C) milk
- D) automobiles

Ans: B

Difficulty: E

Source: 2.5

Page: 34

Type: A

67. Which one of the following will not cause a change in the demand for gasoline?

- A) more people deciding to live closer to their workplace
- B) more people purchasing large pickup trucks and sport utility vehicles
- C) new technology that lowers the cost of producing gasoline
- D) expectations of consumers that the price of gasoline will be significantly greater next week

Ans: C

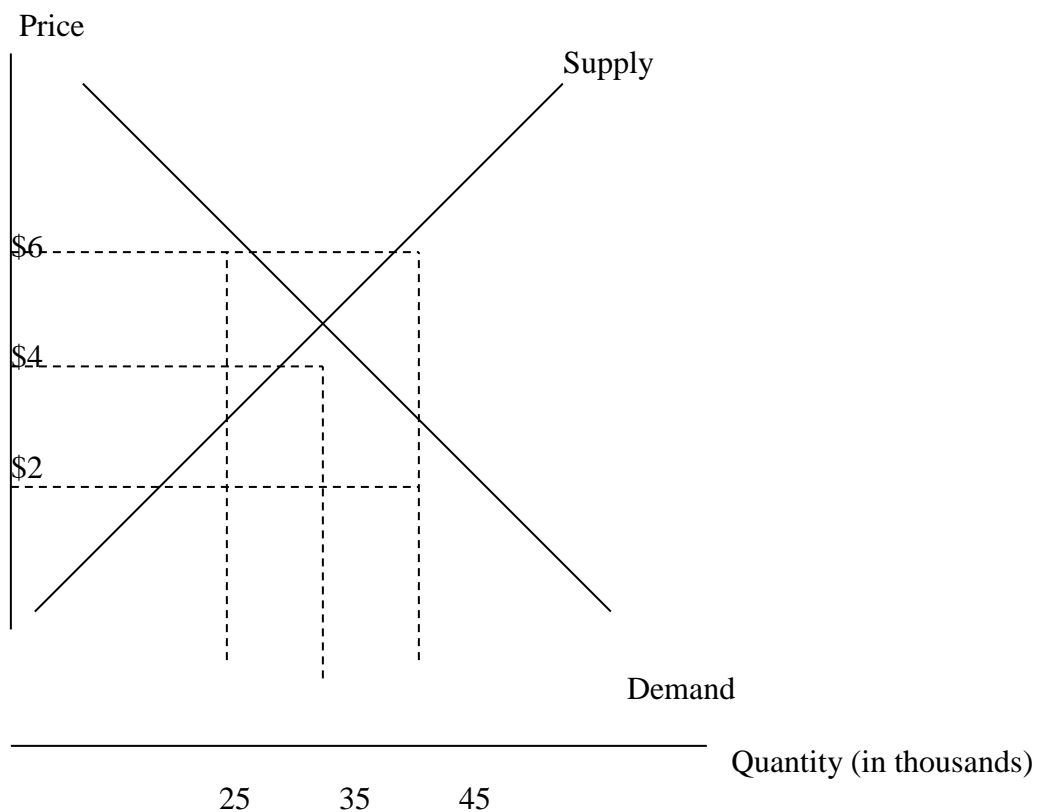
Difficulty: M

Source: 2.3

Page: 24

Type: F

Figure 2.1



68. Referring to *Figure 2.1*, what is the equilibrium price and quantity in this market?

- A) P=\$2 and Q=35,000
- B) P=\$4 and Q=35,000
- C) P=\$6 and Q=25,000
- D) P=\$2 and Q=45,000

Ans: B

Difficulty: E
Section: 2.2
Page: 22
Type: A

69. Referring to *Figure 2.1*, assuming an effective price ceiling of \$2 is imposed in this market, what will be the new quantity sold in this market?

- A) 25,000
- B) 35,000
- C) 45,000
- D) There is not sufficient information.

Ans: A
Difficulty: E
Section: 2.4
Page 29
Type: A

70. Referring to *Figure 2.1*, assuming an effective price ceiling of \$2 imposed in this market, how much is the per unit non-money cost consumers are willing to sacrifice in order to acquire some of the good or service?

- A) \$2
- B) \$4
- C) \$6
- D) \$8

Ans: B
Difficulty: H
Section: 2.4
Page: 29
Type: A

71. Which of the following is not a form of non-money payment consumers forfeit in order to acquire some of the good or service in a market with a price ceiling?

- A) reduced quality of the good or service
- B) time spent searching waiting in line
- C) allocation of the good or service based on seller preference
- D) the opportunity cost of producing the good or service

Ans: D
Difficulty: M

Section: 2.4

Page 29

Type: F

72. Which one of the following would cause the demand for coffee to increase?

- A) an increase in the price of tea, a substitute for coffee
- B) a decrease in the price of tea, a substitute for coffee
- C) an increase in the price of cream, a complement to coffee
- D) a decrease in the price of coffee

Ans: A

Difficulty: E

Section 2.1

Page: 18

Type: F

73. Following a natural disaster such as a hurricane or earthquake, the demand for some goods like ice and plywood increase, causing their prices to rise two, three, sometimes even four times their pre-disaster price. This increase in the price of these goods

- A) makes consumers in the affected area worse off because the higher prices reduce the supply of the scarce goods.
- B) makes consumers in the affected area better off because the higher prices increase their aggregate disposable income.
- C) makes consumers in the affected area better off because the higher prices create the incentive for people to conserve these goods and for suppliers to bring more of them to the affected market.
- D) makes consumers in the affected area worse off because the higher prices lead to longer lines and black markets.

Ans: C

Difficulty: E

Section 2.3

Page: 24

Type: F

74. When competition is present for some good such as gasoline, and its price suddenly increases substantially, we can infer

- A) that the higher price was most likely arbitrarily set by greedy gas companies seeking increased profits.

- B) that the higher price was most likely a response to a change in market forces beyond any individual's or firm's control.
- C) nefarious intent on the part of gasoline companies and that a government mandated price ceiling would serve consumers' interests.
- D) that prices are not good indicators of relative scarcity.

Ans: B

Difficulty: M

Section: 2.2

Page 22

Type: F

75. Which one of the following is not a factor in the elasticity of demand for a good or service?
- A) length of time the price change is in effect
 - B) available substitutes for the good or service
 - C) the percentage of one's budget the item consumes
 - D) the cost of producing the good or service

Ans: D

Difficulty: E

Section: 2.5

Page: 38

Type: F

76. If the median household income in some town increased from \$50,000 to \$60,000, and the median housing expenditure increased from \$1,400 per month to \$1,484 per month, the income elasticity of demand for housing is
- A) -0.4
 - B) 0.6
 - C) 1.0
 - D) 1.2

Ans: B

Difficulty: M

Section: 2.5

Page: 40

Type: A

77. For which one of the following goods is the long-run elasticity of demand greatest?
- A) Cigarettes

- B) Chevrolet automobiles
- C) Beer
- D) Water

Ans: B
Difficulty: E
Section: 2.5
Page: 40
Type: F

78. Which one of the following is held constant along a given demand curve?
- A) Consumers' income
 - B) The price of the good the demand curve represents
 - C) The cost of producing the good the demand curve represents
 - D) The quantity of the good the demand curve represents

Ans: C
Difficulty: E
Section: 2.1
Page: 18
Type: F

79. The state of Florida enacted anti-gouging legislation that imposes criminal penalties on individuals or firms that charge more for their goods or services after a disaster, like a hurricane or tornado, than they charged just prior to the disaster. Which of the following represents the social loss of this legislation?
- A) people would have to search longer to find available scarce resources like ice, plywood and hotel rooms
 - B) people would spend more time waiting in lines to acquire some of the scarce goods like ice, plywood and hotel rooms
 - C) more people who have alternatives to consuming the scarce goods like ice, plywood and hotel rooms at the higher prices would now consume them
 - D) All of the above represent social losses to the price ceiling.

Ans: D
Difficulty: E
Section: 2.4
Page: 29
Type: A

80. Which one of the following is a complement to the demand for housing?

- A) the price of lumber used to build a home
- B) the interest rate on mortgages needed to purchase a home
- C) consumers changing taste for larger homes
- D) the wages of carpenters used to build homes

Ans: B

Difficulty: M

Section: 2.3

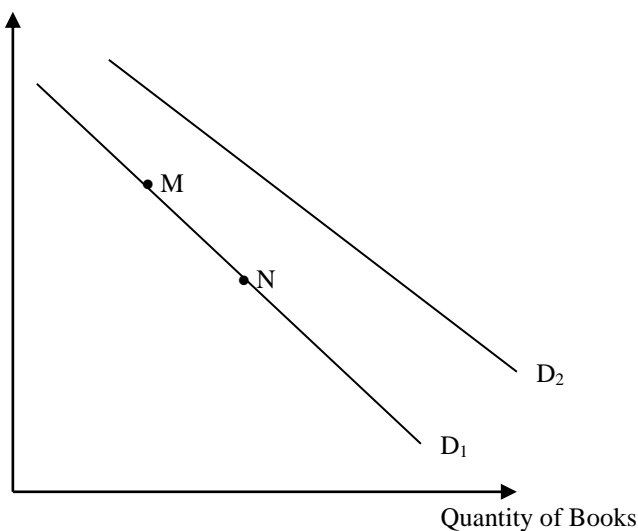
Page: 24

Type: F

Short Answer

81. Explain the difference between a change in demand (supply) and a change in quantity demanded (supplied).

Answer: Price of Books



A change in demand (or shift in demand) is a movement of the entire demand schedule. For example, the move from D₁ to D₂ above is an increase in demand (not an increase in quantity demanded). This can be caused by a change in income the price of related goods, or tastes affecting the quantity demanded *at each possible price*.

A change in quantity demanded is movement along a fixed demand curve. For example, the move from point M to point N represents an increase in quantity demanded. Since the demand

curve does not change, all other factors influencing demand except the price are held constant. In short, a change in price induces a change in quantity demanded, while a change in any factor other than price causes a change in demand. The same reasoning applies to supply curves.

82. Each row and column heading describes a shock to a market initially in equilibrium. Fill in the table indicating whether the new equilibrium price and quantity will increase, decrease, or not change.

Answer:

	No change in Supply	Increase in Supply	Decrease in Supply
No change in Demand	P* same, Q* same	P* lower, Q* higher	P* higher, Q* lower
Increase in Demand	P* higher, Q* higher	P* ambiguous, Q* higher	P* higher, Q* ambiguous
Decrease in Demand	P* lower, Q* lower	P* lower, Q* ambiguous	P* ambiguous, Q* lower

83. Let the market demand for rye bread be given by $Q = 500 + I - 250P_{rye} + 400P_{wheat}$, where Q is monthly demand in number of loaves, I is average monthly income in dollars, P_{rye} is the price of a loaf of rye bread, and P_{wheat} is the price of a loaf of wheat bread. If $I = \$1,000$, $P_{rye} = \$2$, and $P_{wheat} = \$3$, calculate the following (based on 10% changes in denominators):

(a) the arc price elasticity of demand for rye bread

Answer:

$Q = 500 + 1,000 - 250(2) + 400(3) = 2,200$. A 10% increase in the price of rye bread from \$2 to \$2.20 results in $Q = 2,150$ for $\Delta Q = -50$. Note that I and P_{wheat} are held constant in this

calculation. Thus,
$$\eta_{Q_{rye}, P_{rye}} = \frac{\frac{\Delta Q_{rye}}{\frac{1}{2}(Q_{rye1} + Q_{rye2})}}{\frac{\Delta P_{rye}}{\frac{1}{2}(P_{rye1} + P_{rye2})}} = \frac{-50 / \frac{1}{2}(2,200 + 2,150)}{0.20 / \frac{1}{2}(2 + 2.20)} = \frac{-.023}{.095} = -.241$$

The demand for rye bread is inelastic because $\eta_{Q_{rye}, P_{rye}}$ is greater than -1 or equivalently $|\eta_{Q_{rye}, P_{rye}}| <$

1.

Note that this differs from the $\eta_{Q_{rye}, P_{rye}} = -.234$ if we used a 5% increase in the price of rye bread.

Why? The reason is that we are working with linear demand curves, for simplicity, and an elasticity varies along linear demand curve.

(b) the arc price elasticity of demand for wheat bread

Answer: This requires more information, namely the market demand for wheat bread.

(c) the arc cross-price elasticity of demand for rye bread

Answer:

$Q = 500 + 1,000 - 250(2) + 400(3) = 2,200$. A 10% increase in the price of wheat bread from \$3 to \$3.30 results in $Q = 2,320$ for $\Delta Q = +120$. Note that I and P_{rye} are held constant in this

calculation. Thus,
$$\eta_{Q_{rye}, P_{wheat}} = \frac{\frac{\Delta Q_{rye}}{\frac{1}{2}(Q_{rye1} + Q_{rye2})}}{\frac{\Delta P_{wheat}}{\frac{1}{2}(P_{wheat1} + P_{wheat2})}} = \frac{120 / \frac{1}{2}(2,200 + 2,320)}{0.30 / \frac{1}{2}(3 + 3.30)} = \frac{.053}{.095} = .558$$

Rye and wheat breads are substitutes because $\eta_{Q_{rye}, P_{wheat}} > 0$.

(d) the arc income elasticity of demand for rye bread

Answer:

$Q = 500 + 1,000 - 250(2) + 400(3) = 2,200$. A 10% increase in income from \$1,000 to \$1,100 results in $Q = 2,300$ for $\Delta Q = +100$. Note that P_{wheat} and P_{rye} are held constant in this

calculation. Thus,
$$\eta_{Q_{rye}, I} = \frac{\frac{\Delta Q_{rye}}{\frac{1}{2}(Q_{rye1} + Q_{rye2})}}{\frac{\Delta I}{\frac{1}{2}(I_1 + I_2)}} = \frac{100 / \frac{1}{2}(2,200 + 2,300)}{100 / \frac{1}{2}(1,000 + 1,100)} = \frac{.044}{.095} = .467$$

Rye bread is a normal good because $\eta_{Q_{rye}, I} > 0$.

84. Explain how a change in price affects total expenditure by filling in each cell with the resulting change in total expenditure.

Answer:

Demand is ...	Increase in Price	Decrease in Price
Elastic	Lower total expenditure	Higher total expenditure
Unit-elastic	Total expenditure is unchanged	Total expenditure is unchanged
Inelastic	Higher total expenditure	Lower total expenditure

85. Explain how a change in price affects total expenditure by filling in each cell with the change in price that must have occurred.

Answer:

Demand is ...	Higher Total Expenditure	Lower Total Expenditure
Elastic	Price decreased	Price increased
Inelastic	Price increased	Price decreased

86. For each of the following market situations, explain whether the supply curve or the demand curve shifts, in which direction does it shift, and the equilibrium price and quantity as a result of the change.

a. The market is for Ginkgo Biloba after studies show its efficacy at memory retention with no adverse side effects.

Answer: The demand curve shifts up and to the right, resulting in a higher price and quantity sold in the market.

b. The market is for automobiles after the price of steel, which is used to produce automobiles, increases by 50%.

Answer: The supply curve shifts back and to the left, resulting in a higher price and reduced quantity sold in the market.

c. The market is for daily newspapers as more news becomes available for free on the Internet.

Answer: The demand curve shifts down and to the left, resulting in a lower price and reduced quantity sold in the market.

d. The market is for accounting services after spreadsheet and accounting software is introduced for use with personal computers.

Answer: The supply curve shifts out and to the right, resulting in a lower price and increased quantity sold in the market.

87. The demand curve for soda is represented by the following equation: $Q=12-2P$. If at the current market price the elasticity of demand for soda is 2, what is the market price?

Answer:

Using the information given, we can fill in part of the point elasticity formula and solve for P.

$$\eta = \frac{dQ}{dP} \cdot \frac{P}{Q}$$

$\eta = -2$ and $\frac{dQ}{dP} = -2$. Lastly, Q is given as $12 - 2P$. Therefore: $-2 = -2 \left(\frac{P}{12 - 2P} \right)$ and $P = 4$