

Terms and Definitions

Choose a definition for each key term.

Key Terms

- ___ Market
- ___ Competitive market
- ___ Monopoly
- ___ Quantity demanded
- ___ Law of demand
- ___ Demand schedule
- ___ Demand curve
- ___ Normal good
- ___ Inferior good
- ___ Substitutes
- ___ Complements
- ___ Quantity supplied
- ___ Law of supply
- ___ Supply schedule
- ___ Supply curve
- ___ Equilibrium
- ___ Equilibrium price
- ___ Equilibrium quantity
- ___ Surplus
- ___ Shortage
- ___ Law of supply and demand

Definitions

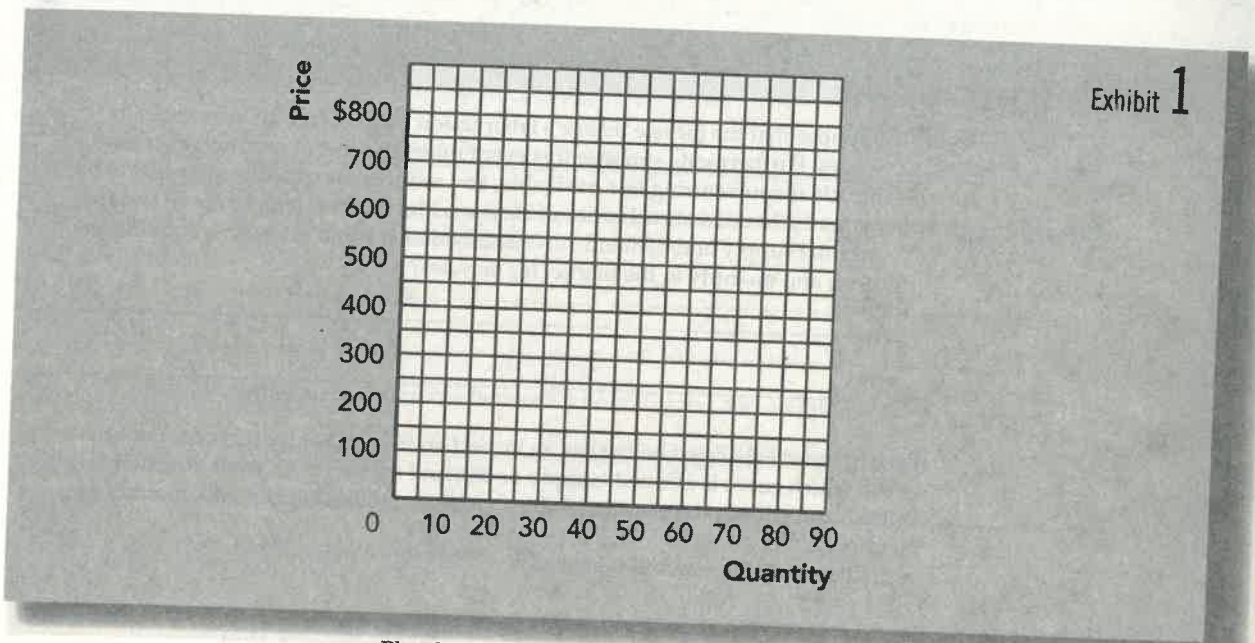
1. The quantity supplied and the quantity demanded at the equilibrium price
2. A table that shows the relationship between the price of a good and the quantity demanded
3. A table that shows the relationship between the price of a good and the quantity supplied
4. Two goods for which an increase in the price of one leads to an increase in the demand for the other
5. A group of buyers and sellers of a particular good or service
6. Market with only one seller
7. A good for which, other things equal, an increase in income leads to a decrease in demand
8. A situation in which quantity demanded is greater than quantity supplied
9. A situation in which quantity supplied is greater than quantity demanded
10. The amount of a good that buyers are willing and able to purchase
11. A situation in which the price has reached the level where quantity supplied equals quantity demanded
12. A market in which there are many buyers and sellers so that each has a negligible impact on the market price
13. The claim that, other things equal, the quantity demanded of a good falls when the price of the good rises
14. A graph of the relationship between the price of a good and the quantity demanded
15. The price that balances quantity supplied and quantity demanded
16. The amount of a good that sellers are willing and able to sell
17. The claim that, other things equal, the quantity supplied of a good rises when the price of the good rises
18. The claim that the price of any good adjusts to bring the quantity supplied and quantity demanded for that good into balance
19. Two goods for which an increase in the price of one leads to a decrease in the demand for the other
20. A good for which, other things equal, an increase in income leads to an increase in demand
21. A graph of the relationship between the price of a good and the quantity supplied

Problems and Short-Answer Questions

Practice Problems

1. Suppose we have the following market supply and demand schedules for bicycles:

Price	Quantity Demanded	Quantity Supplied
\$100	70	30
200	60	40
300	50	50
400	40	60
500	30	70
600	20	80



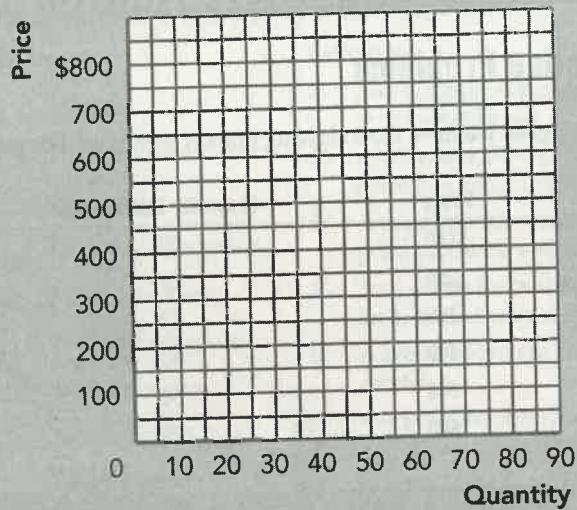
- Plot the supply curve and the demand curve for bicycles in Exhibit 1.
- What is the equilibrium price of bicycles?

- What is the equilibrium quantity of bicycles?

- If the price of bicycles were \$100, is there a surplus or a shortage? How many units of surplus or shortage are there? Will this cause the price to rise or fall?

- If the price of bicycles were \$400, is there a surplus or a shortage? How many units of surplus or shortage are there? Will this cause the price to rise or fall?

Exhibit 2



- f. Suppose that the bicycle maker's labor union bargains for an increase in its wages. Furthermore, suppose this event raises the cost of production, makes bicycle manufacturing less profitable, and reduces the quantity supplied of bicycles by 20 units at each price of bicycles. Plot the new supply curve and the original supply and demand curves in Exhibit 2. What is the new equilibrium price and quantity in the market for bicycles?

2. Each of the events listed below has an impact on the market for bicycles. For each event, which curve is affected (supply or demand for bicycles), what direction is it shifted, and what is the resulting impact on the equilibrium price and quantity of bicycles?

a. The price of automobiles increases.

b. Consumers' incomes decrease, and bicycles are a normal good.

c. The price of steel used to make bicycle frames increases.

d. An environmental movement shifts tastes toward bicycling.

e. Consumers expect the price of bicycles to fall in the future.

f. A technological advance in the manufacture of bicycles occurs.

g. The prices of bicycle helmets and shoes are reduced.

h. Consumers' incomes decrease, and bicycles are an inferior good.

3. The following questions address a market when both supply and demand shift.
- What would happen to the equilibrium price and quantity in the bicycle market if there were an increase in both the supply and the demand for bicycles?

 - What would happen to the equilibrium price and quantity in the bicycle market if the demand for bicycles increases more than the increase in the supply of bicycles?

Short-Answer Questions

- What are the two main characteristics of a perfectly competitive market?

- Explain the law of demand.

- What are the variables that should affect the amount of a good that consumers wish to buy, other than its price?

- What is the difference between a normal good and an inferior good?

- Explain the law of supply.

- What are the variables that should affect the amount of a good that producers wish to sell, other than its price?

- Suppose *suppliers* of corn expect the price of corn to rise in the future. How would this affect the supply and demand for corn and the equilibrium price and quantity of corn?

8. If there is a surplus of a good, is the price above or below the equilibrium price for that good?

9. Suppose there is an increase in consumers' incomes. In the market for automobiles (a normal good), does this event cause an increase in demand or an increase in quantity demanded? Does this cause an increase in supply or an increase in quantity supplied? Explain.

10. Suppose there is an advance in the technology employed to produce automobiles. In the market for automobiles, does this event cause an increase in supply or an increase in the quantity supplied? Does this cause an increase in demand or an increase in the quantity demanded? Explain.

Self-Test

True/False Questions

- 1. A perfectly competitive market consists of products that are all slightly different from one another.
- 2. A monopolistic market has only one seller.
- 3. The law of demand states that an increase in the price of a good decreases the demand for that good.
- 4. If apples and oranges are substitutes, an increase in the price of apples will decrease the demand for oranges.
- 5. If golf clubs and golf balls are complements, an increase in the price of golf clubs will decrease the demand for golf balls.
- 6. If consumers expect the price of shoes to rise, there will be an increase in the demand for shoes today.
- 7. The law of supply states that an increase in the price of a good increases the quantity supplied of that good.

- _____ 8. An increase in the price of steel will shift the supply of automobiles to the right.
- _____ 9. When the price of a good is below the equilibrium price, it causes a surplus.
- _____ 10. The market supply curve is the horizontal summation of the individual supply curves.
- _____ 11. If there is a shortage of a good, then the price of that good tends to fall.
- _____ 12. If pencils and paper are complements, an increase in the price of pencils causes the demand for paper to decrease or shift to the left.
- _____ 13. If Coca-Cola and Pepsi are substitutes, an increase in the price of Coca-Cola will cause an increase in the equilibrium price and quantity in the market for Pepsi.
- _____ 14. An advance in the technology employed to manufacture Rollerblades™ will result in a decrease in the equilibrium price and an increase in the equilibrium quantity in the market for Rollerblades™.
- _____ 15. If there is an increase in supply accompanied by a decrease in demand for coffee, then there will be a decrease in both the equilibrium price and quantity in the market for coffee.

Multiple-Choice Questions

1. A perfectly competitive market has
 - a. only one seller.
 - b. at least a few sellers.
 - c. many buyers and sellers.
 - d. firms that set their own prices.
 - e. none of the above.
2. If an increase in the price of blue jeans leads to an increase in the demand for tennis shoes, then blue jeans and tennis shoes are
 - a. substitutes.
 - b. complements.
 - c. normal goods.
 - d. inferior goods.
 - e. none of the above.
3. The *law of demand* states that an increase in the price of a good
 - a. decreases the demand for that good.
 - b. decreases the quantity demanded for that good.
 - c. increases the supply of that good.
 - d. increases the quantity supplied of that good.
 - e. does none of the above.
4. The *law of supply* states that an increase in the price of a good
 - a. decreases the demand for that good.
 - b. decreases the quantity demanded for that good.
 - c. increases the supply of that good.
 - d. increases the quantity supplied of that good.
 - e. does none of the above.
5. If an increase in consumer incomes leads to a decrease in the demand for camping equipment, then camping equipment is
 - a. a complementary good.
 - b. a substitute good.
 - c. a normal good.
 - d. an inferior good.
 - e. none of the above.

6. A monopolistic market has
 - a. only one seller.
 - b. at least a few sellers.
 - c. many buyers and sellers.
 - d. firms that are price takers.
 - e. none of the above.
7. Which of the following shifts the demand for watches to the right?
 - a. a decrease in the price of watches
 - b. a decrease in consumer incomes if watches are a normal good
 - c. a decrease in the price of watch batteries if watch batteries and watches are complements
 - d. an increase in the price of watches
 - e. none of the above
8. All of the following shift the supply of watches to the right except
 - a. an increase in the price of watches.
 - b. an advance in the technology used to manufacture watches.
 - c. a decrease in the wage of workers employed to manufacture watches.
 - d. manufacturers' expectations of lower watch prices in the future.
 - e. All of the above cause an increase in the supply of watches.
9. If the price of a good is above the equilibrium price,
 - a. there is a surplus, and the price will rise.
 - b. there is a surplus, and the price will fall.
 - c. there is a shortage, and the price will rise.
 - d. there is a shortage, and the price will fall.
 - e. the quantity demanded is equal to the quantity supplied, and the price remains unchanged.
10. If the price of a good is below the equilibrium price,
 - a. there is a surplus, and the price will rise.
 - b. there is a surplus, and the price will fall.
 - c. there is a shortage, and the price will rise.
 - d. there is a shortage, and the price will fall.
 - e. the quantity demanded is equal to the quantity supplied, and the price remains unchanged.
11. If the price of a good is equal to the equilibrium price,
 - a. there is a surplus, and the price will rise.
 - b. there is a surplus, and the price will fall.
 - c. there is a shortage, and the price will rise.
 - d. there is a shortage, and the price will fall.
 - e. the quantity demanded is equal to the quantity supplied, and the price remains unchanged.
12. An increase (rightward shift) in the demand for a good will tend to cause
 - a. an increase in the equilibrium price and quantity.
 - b. a decrease in the equilibrium price and quantity.
 - c. an increase in the equilibrium price and a decrease in the equilibrium quantity.
 - d. a decrease in the equilibrium price and an increase in the equilibrium quantity.
 - e. none of the above.
13. A decrease (leftward shift) in the supply for a good will tend to cause
 - a. an increase in the equilibrium price and quantity.
 - b. a decrease in the equilibrium price and quantity.
 - c. an increase in the equilibrium price and a decrease in the equilibrium quantity.
 - d. a decrease in the equilibrium price and an increase in the equilibrium quantity.
 - e. none of the above.

14. Suppose there is an increase in both the supply and demand for personal computers. In the market for personal computers, we would expect the
- equilibrium quantity to rise and the equilibrium price to rise.
 - equilibrium quantity to rise and the equilibrium price to fall.
 - equilibrium quantity to rise and the equilibrium price to remain constant.
 - equilibrium quantity to rise and the change in the equilibrium price to be ambiguous.
 - change in the equilibrium quantity to be ambiguous and the equilibrium price to rise.
15. Suppose there is an increase in both the supply and demand for personal computers. Furthermore, suppose the supply of personal computers increases more than demand for personal computers. In the market for personal computers, we would expect the
- equilibrium quantity to rise and the equilibrium price to rise.
 - equilibrium quantity to rise and the equilibrium price to fall.
 - equilibrium quantity to rise and the equilibrium price to remain constant.
 - equilibrium quantity to rise and the change in the equilibrium price to be ambiguous.
 - change in the equilibrium quantity to be ambiguous and the equilibrium price to fall.
16. Which of the following statements is true about the impact of an increase in the price of lettuce?
- The demand for lettuce will decrease.
 - The supply of lettuce will decrease.
 - The equilibrium price and quantity of salad dressing will rise.
 - The equilibrium price and quantity of salad dressing will fall.
 - Both *a* and *d* are true.
17. Suppose a frost destroys much of the Florida orange crop. At the same time, suppose consumer tastes shift toward orange juice. What would we expect to happen to the equilibrium price and quantity in the market for orange juice?
- Price will increase; quantity is ambiguous.
 - Price will increase; quantity will increase.
 - Price will increase; quantity will decrease.
 - Price will decrease; quantity is ambiguous.
 - The impact on both price and quantity is ambiguous.
18. Suppose consumer tastes shift toward the consumption of apples. Which of the following statements is an accurate description of the impact of this event on the market for apples?
- There is an increase in the demand for apples and an increase in the quantity supplied of apples.
 - There is an increase in the demand and supply of apples.
 - There is an increase in the quantity demanded of apples and in the supply for apples.
 - There is an increase in the demand for apples and a decrease in the supply of apples.
 - There is a decrease in the quantity demanded of apples and an increase in the supply for apples.
19. Suppose both buyers and sellers of wheat expect the price of wheat to rise in the near future. What would we expect to happen to the equilibrium price and quantity in the market for wheat today?
- The impact on both price and quantity is ambiguous.
 - Price will increase; quantity is ambiguous.
 - Price will increase; quantity will increase.
 - Price will increase; quantity will decrease.
 - Price will decrease; quantity is ambiguous.

20. An inferior good is one for which an increase in income causes a(n)
- increase in supply.
 - decrease in supply.
 - increase in demand.
 - decrease in demand.

Advanced Critical Thinking

You are watching a national news broadcast. It is reported that an early snowstorm is heading for Washington state and that it will likely destroy much of this year's apple crop. Your roommate says, "If there are going to be fewer apples available, I'll bet that apple prices will rise. We should buy enormous quantities of apples now and put them in storage. Later we will sell them and make a killing."

1. If this information about the storm is publicly available so that all buyers and sellers in the apple market expect the price of apples to rise in the future, what will happen immediately to the supply and demand for apples and the equilibrium price and quantity of apples?

2. Can you "beat the market" with public information? That is, can you use publicly available information to help you buy something cheap and quickly sell it at a higher price? Why or why not?

3. Suppose a friend of yours works for the U.S. Weather Bureau. She calls you and provides you with inside information about the approaching storm—information not available to the public. Can you "beat the market" with inside information? Why or why not?
