Chapter 2

Demand and Supply: The Basics of the Market

Answers to End-of-Chapter Problems

1. Buyers in markets purchase goods or services and pay for them. Sellers in markets offer goods or services for purchase at some price.

2. Global markets have operations in multiple countries. They allow buyers and sellers to be anywhere in the world. Global markets are often the province of globe-spanning companies called multinationals.

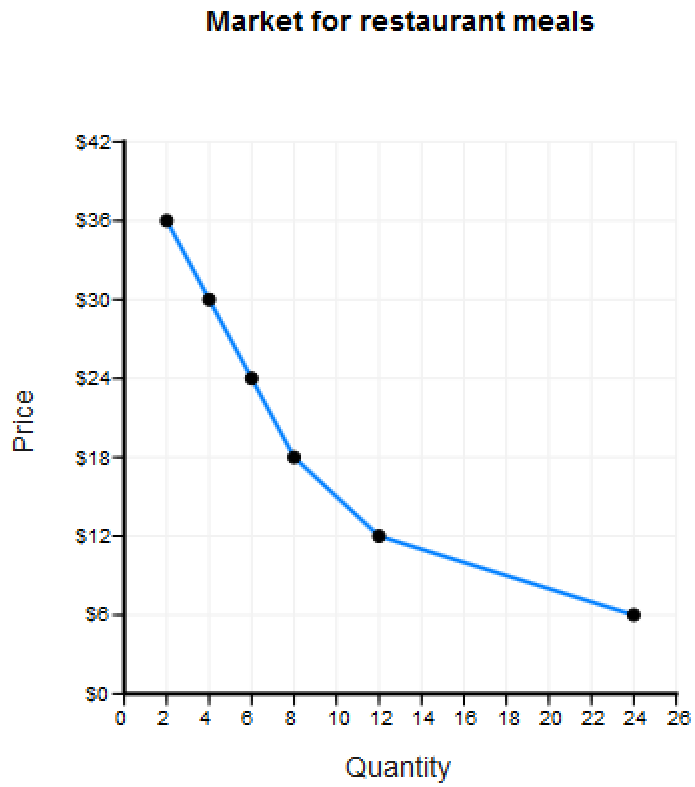
3. The market price is the typical price at which a good or service sells in a market. A sale price, for example, is intentionally set below the market price to stimulate purchases. Negotiated prices are determined by individual buyers and sellers on a case-by-case basis. A volume discount is a lower price for making a large purchase.

4. You reach satiation at the point where the value to you of consuming any more of the good disappears even if the price is zero.

5. The demand curve is the graphical representation of the demand schedule. It shows the various quantities consumers are willing and able to purchase at various prices.

6. a) The demand curve for restaurant meals is a downward-sloping diagonal curve between points (2, \$36) and (24, \$6). The demand curve shows the various quantities consumers are willing and able to buy at various prices.

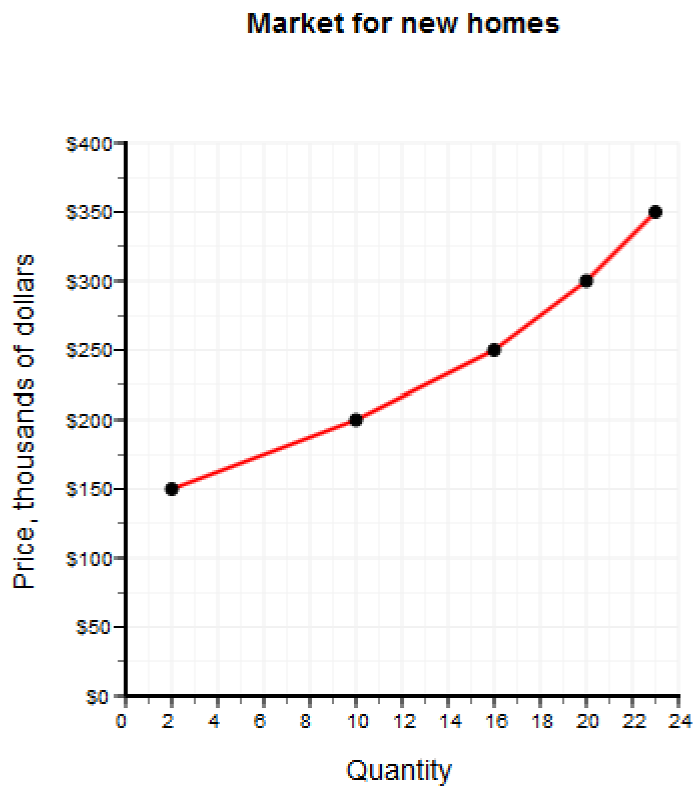
   b) When the price is \$18, the quantity demanded will be 8 restaurant meals per month. (See graph on next page).



7. All other things being equal, when the price of a good increases, the quantity supplied typically increases. A higher price is attractive to producers.

8. a) The supply curve for new homes is an upward-sloping curve between points (2, \$150,000) and (23, \$350,000). The supply curve shows the various quantities producers are willing and able to supply at various prices.

   b) When the price is \$250,000, the quantity supplied will be 16 homes. (See graph on next page).



9. The rise of the smartphone created many new markets, including the market for iPhone applications (apps). Other related markets may still emerge.

Chapter 2

Demand and Supply: The Basics of the Market Economy

Chapter Outline

- Prices, Buyers, and Sellers
  - Local, National, and Global Markets
  - The Market Price
- How Price Affects the Quantity Demanded
  - The Law of Demand
  - The Special Case of Zero Price
  - Graphing the Demand Curve
- How Price Affects the Quantity Supplied
  - The Law of Supply
  - Graphing the Supply Schedule
- New Markets

Alternate Lecture Outline

- Prices, Buyers, and Sellers
  - The Market Price
- How Price Affects the Quantity Demanded
  - The Law of Demand
  - The Special Case of Zero Price
- How Price Affects the Quantity Supplied
  - The Law of Supply
- How Price Affects the Quantity Demanded
  - Graphing the Demand Curve
- How Price Affects the Quantity Supplied
  - Graphing the Supply Schedule
- Prices, Buyers, and Sellers
  - Local, National, and Global Markets
- New Markets

Potential Stumbling Blocks

Students might have difficulty correctly using the words “demand” and “supply.” Remind them that these words refer to the *relationships* between price and quantity. This will become more important in the next chapter when they put supply and demand together.

Make sure students know that any time you construct a demand or supply schedule or curve, it relates to a specific good, a specific group of buyers, and a specific time frame. Each can be defined as narrowly or broadly as needed. For example, you could speak of the demand for apples in Cook County, Illinois during 2007 or the demand for Fuji apples in Hyde Park in June 2007, and so on.

Finally, as you know, many students are uncomfortable with graphing. Beginning with a demand or supply schedule (as a table) is a helpful way to ease students into the demand and supply curves because information on a table is often easier to understand. If you did not take the time to cover the material in the appendix to Chapter 1, you may find now that it is helpful.

Additional Resources

The *New York Times* ran an opinion piece on the proposed "summer gasoline tax holiday" that was much discussed by U.S. presidential candidates in the spring of 2008. In it, the author clearly confused the terms "demand" and "quantity demanded." This kind of confusion leads to an awful (and unrealistic) price cycle: prices go down, which increases *demand*, which causes prices to go up. A *Washington Post* story on the same issue makes the same error.
New York Times article
Washington Post article

Changes to the Third Edition

The Economic Milestone box discussing the first prepaid tuition plan in 1986 has been relocated to under the *Prices, Buyers, and Sellers* heading. The Spotlight discussing the Great Ethanol Boom now introduces the regulatory cause of the increase in ethanol demand and discusses what would happen if the ethanol mandate was reduced. New examples and updated statistics have been added throughout.

Spotlight Questions

Spotlight: The Milk Market

1. The market for fluid milk in the United States is mainly a
   A. national market.
   B. global market.
   C. local market.
   D. public market.

2. A complicated set of government regulations __________ long-distance shipments of fluid milk.
   A. encourages
   B. discourages
   C. prohibits
   D. requires

Spotlight: The Great Ethanol Boom

3. Rising prices of corn between 2005 and 2007 resulted in
   A. a decrease in demand.
   B. a decrease in quantity demanded.
   C. an increase in supply.
   D. an increase in quantity supplied.

4. The corn ethanol boom was NOT good for
   A. consumers who eat pork and beef.
   B. farmers who grow corn.
   C. consumers who use corn ethanol.
   D. government regulators.

Spotlight Questions Answer Key

1: C, 2: B, 3: D, 4: A

Chapter Quiz Answer Key

1: C, 2: C, 3: A, 4: D, 5: B, 6: D, 7: B, 8: B, 9: A, 10: D

Chapter 2 Quiz **Name:** ______________________________ **Date:** ___________

1. Which of the following goods or services is most likely to be bought and sold in a local market?
   A. Textbooks
   B. Magazine subscriptions
   C. Dog grooming
   D. Precious metals

2. Suppose that a house is listed for sale at $250,000. What can be said about the price that a home buyer eventually pays for the house?
   A. The homebuyer will pay $250,000 because this is the market price for the house.
   B. If the homebuyer waits for a sale, he or she may be able to buy the house for less.
   C. Through negotiation, the home buyer may pay less for the house or have additional items added to the purchase.
   D. If the home buyer buys enough homes, he or she may qualify for a volume discount and pay less for the house.

3. What are the two variables shown in a demand schedule?
   A. Price and quantity demanded
   B. Market price and sales price
   C. Individual quantity demanded and market quantity demanded
   D. Demand and supply

4. What does the Latin phrase ceteris paribus mean?
   A. "Buyer beware"
   B. "And so on"
   C. "Led by an invisible hand"
   D. "All other things equal"

5. The law of demand
   A. is always and everywhere true.
   B. describes a general tendency that is true in most normal situations.
   C. applies only to the goods and services that buyers want most.
   D. has been repeatedly discredited.

6. Suppose a local bowling alley offers a membership program in which games are free to those who pay a monthly membership fee. Which of the following statements is true regarding how many games members will bowl per month?
   A. Members will bowl as many games as they have time for.
   B. Members will bowl as many games as they can until they are physically unable to bowl anymore.
   C. Members will bowl as many games as they would have in the absence of a membership program.
   D. Members will bowl as many games as it takes so that additional games no longer make them happier than other things they could spend their time doing.

7. What is the best way to investigate a consumer's demand behavior?
   A. Mail her a survey.
   B. Observe her buying behavior.
   C. Subject her to psychological evaluations.
   D. Interview her in person.

8. A supply curve is
   A. downward-sloping.
   B. a graphical representation of the information in a supply schedule.
   C. always a straight line.
   D. All of the above are true of supply curves.

9. The market supply schedule
   A. combines the quantity supplied by all of the businesses in a market.
   B. has as many columns as the market does businesses.
   C. relates quantity demanded and supplied.
   D. does not initially exist in new markets.

10. Why do new markets arise?
    A. New technologies
    B. Changing needs of consumers
    C. Increased incomes of developing nations
    D. All of the above can give rise to new markets.

Chapter 2

Demand and Supply: The Basics of the Market Economy

Learning Objectives

2-1: Describe key elements of a market.

2-2: Explain how the price in a market affects the quantity demanded.

2-3: Explain how the price in a market affects the quantity supplied.

2-4: Discuss why the number of markets can increase.

Key Elements of a Market

- **Markets** consist of buyers and sellers.
- Voluntary exchange of a product for money.
  - **Product** can be a good or service.
- **Price** is the rate at which buyer and seller exchange money for good or service.

Example of a Market

- Starbucks is an example of a market.
  - Starbucks is a buyer of coffee beans and employee hours.
  - Starbucks is a seller of coffee
  - Consumers buy coffee and other products

Local and National Markets

- Markets differ geographically.
- **Local markets** - buyers and sellers are geographically close to each other
  - Personal services are an example of a local market (e.g., nail salons, haircuts).
- **National market** - transactions conducted across the country
  - Stock transactions and Amazon.com examples of national markets.

Global Markets

- **Global market** – buyers and sellers can be located anywhere in the world
  - Oil is a product sold in the global market. The price of oil is determined by global supply and demand.
- The internet has transformed local markets into national and global ones.
  - eBay and Amazon give us access to goods on a national and global scale from our computer or smartphone.

Prices Defined

- The **market price** is defined as the typical price at which goods and services are exchanged in a market.

- Identifying the price is not always easy.
  - **Sale price**: seller lowers typical price to stimulate purchases
  - **Negotiated price**:
    - Set by bargaining between buyers and sellers
    - Differs from sticker price
    - Common in markets for big-ticket items such as automobiles

Prices Defined
(continued)

- **Volume Discount:** prices are lowered for large, bulk purchases.
  - Purchases at warehouse stores such as Costco and Sam's Club are examples.
- **Advance Purchase Discount:** purchases made ahead of their use result in lower prices.
  - Purchasing an airline ticket is an example.

Demand Defined

- **Quantity demanded** is the amount of a good or service the buyer is willing and able to purchase at a given price.
  - The quantity demanded for a good or service varies with the price.

- A **demand schedule** lists the quantity demanded at different selling prices and illustrates the relationship between quantity demanded and price.

Demand Defined
(continued)

- Demand schedule is based on the assumption of ***ceteris paribus*** – that all other things are equal.
- ***Ceteris paribus*** assumes that the factors (other than price) that affect demand do not change.
  - These factors include consumer incomes and taste, price of related goods, etc.

Law of Demand

- The **law of demand** states that there is an inverse relationship between quantity demanded and price.
  - As prices go up, people buy less, so quantity demanded decreases.
  - As prices go down, people buy more, so quantity demanded increases.

- Some goods allow unlimited consumption after paying an initial fee.
  - Examples include cell phones, cable plans, and Wi-Fi access.

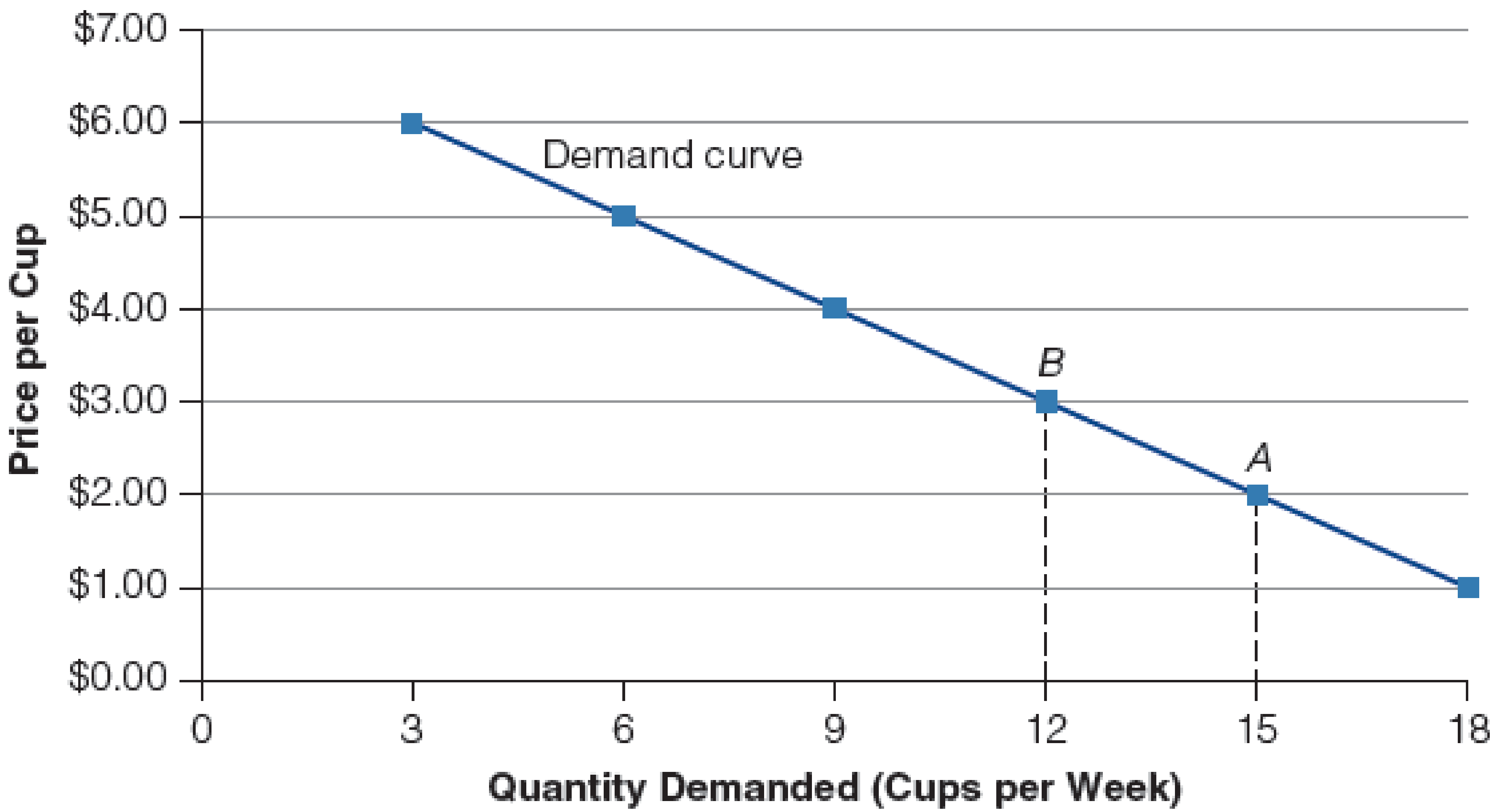
Demand Curve

- The **demand curve** is the graphic representation of the demand schedule (price & quantity demanded combinations).
  - All possible prices are shown on the vertical axis (y-axis).
  - All possible quantities demanded are shown on the horizontal axis (x-axis).
- The demand curve is downward-sloping due to the law of demand.

Demand Schedule for Coffee

Price per Cup (Dollars)	Quantity Demanded (Cups per Week)
$1.00	18
$2.00	15
$3.00	12
$4.00	9
$5.00	6
$6.00	3

Demand Curve for Coffee



Supply Defined

- **Quantity supplied** is the amount of a good or service that the seller is willing and able to produce at a given price.
  - Quantity supplied for a good or service varies with price.
- A **supply schedule** lists the quantity supplied at different selling prices.
  - Illustrates relationship between quantity supplied and price.
  - Supply schedule is again based on *ceteris paribus* conditions.

Law of Supply

- The **law of supply** states that there is a direct (or positive relationship) between quantity supplied and price.
  - As prices go up, businesses have an incentive to produce more, so quantity supplied increases.
  - If prices go down, businesses produce less, so quantity supplied decreases.
- The labor market is a good example of the law of supply.
  - Price of labor is the wage rate.

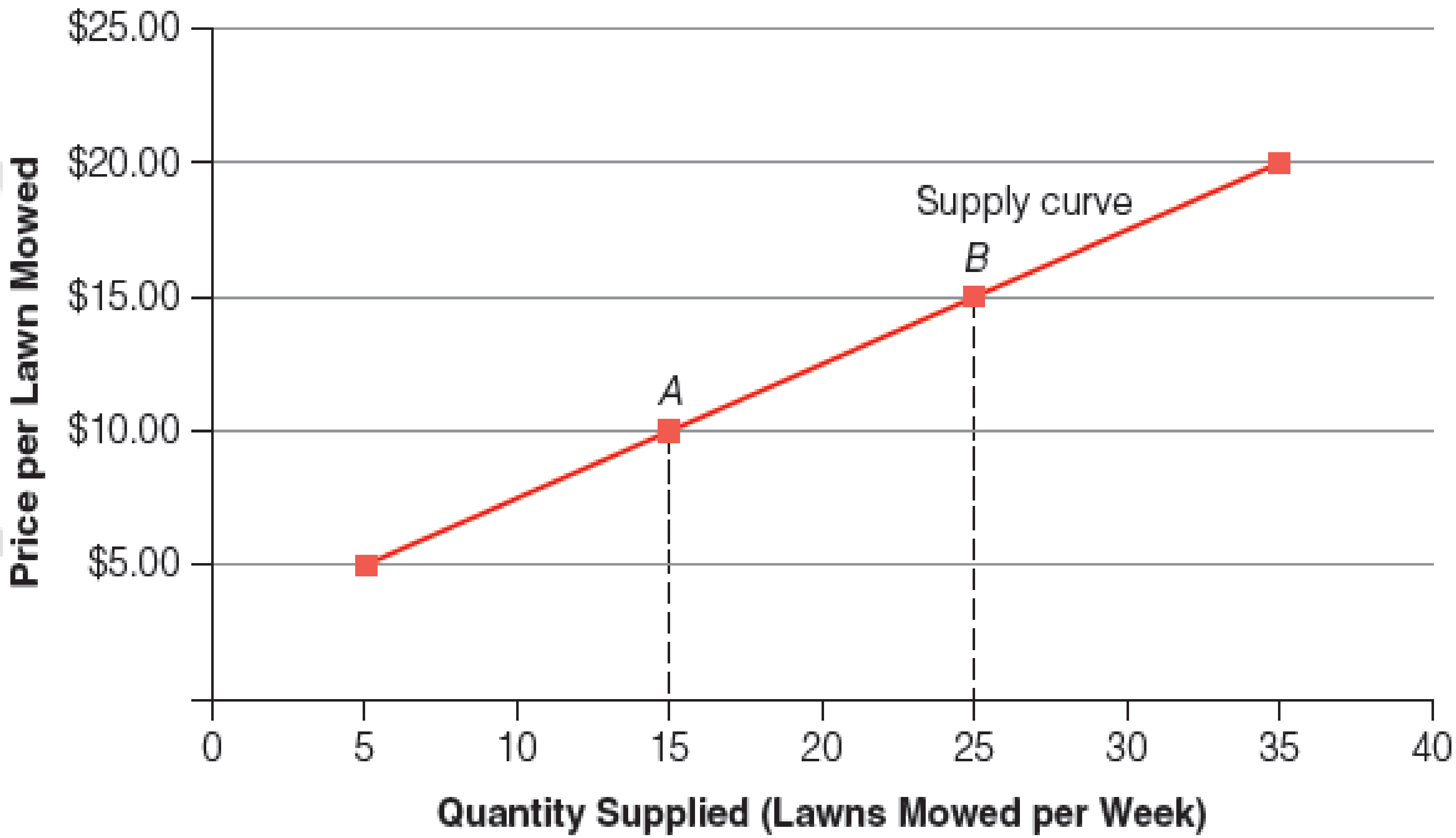
Supply Curve

- The **supply curve** is the graphic representation of the supply schedule.
  – All possible prices are shown on the vertical axis (y-axis).
  – All possible quantities supplied are shown on the horizontal axis (x-axis).
- The supply curve is upward-sloping due to the law of supply.

Supply Schedule for Lawn Mowing

Market Price per Lawn Mowed (Dollars)	Quantity Supplied (Lawns Mowed per Week)
$5.00	5
$10.00	15
$15.00	25
$20.00	35

Supply Curve for Lawn Mowing



New Markets

- Demand and supply schedules describe behavior of buyers and sellers in existing markets.
- **New markets** - created due to changing capabilities of producers and changing needs of consumers.
- New products - include iPad, remote-control drones, etc.
- One major advantage of the market-based economy is the ability to adjust to changes in consumer demand and technological advances.