CHAPTER 7

Market Structures

CONCEPT REVIEW

Competition involves all the actions that sellers, acting independently, take to get buyers to purchase their products.

CHAPTER 7 KEY CONCEPT

A **market structure** is an economic model that helps economists examine the nature and degree of competition among businesses in the same industry.

WHY THE CONCEPT MATTERS

On trips to the mall, you've probably noticed something about the prices of products you're looking to buy. If there are several different brands of the same kind of product, prices tend to be lower. If there's just one brand, however, prices tend to be higher. The level of competition in a market has a major impact on the prices of products. The more sellers compete for your dollars, the more competitive prices will be.

Online Highlights

More at ClassZone.com

Economics Update

Go to **ECONOMICS UPDATE** for chapter updates and current news on competition in the cellular telephone industry. (See Case Study, pp. 220–221.) ▶

SMARTGrapher

Go to **SMART GRAPHER** to complete graphing activities in this chapter.

Interactive Review

Go to **INTERACTIVE REVIEW** for concept review and activities.

How do cellular phone makers compete for your business? See the Case Study on pages 220–221.

SECTION 1

What Is Perfect Competition?

OBJECTIVES

In Section 1, you will
- learn that perfect competition is the ideal by which economists measure all market structures
- explain the characteristics of perfect competition and why it does not exist in the real world
- analyze examples of markets that come close to perfect competition

KEY TERMS

market structure, *p. 192*
perfect competition, *p. 192*
standardized product, *p. 192*
price taker, *p. 193*
imperfect competition, *p. 195*

TAKING NOTES

As you read Section 1, complete a cluster diagram to identify the major characteristics of perfect competition. Use the Graphic Organizer at **Interactive Review @ ClassZone.com**

The Characteristics of Perfect Competition

KEY CONCEPTS

When you buy new clothes, you probably shop around for the best deal. But when you buy milk, you know that a gallon will be about the same price no matter where you shop. The market for clothes has a different level of competition than the market for milk. Economists classify markets based on how competitive they are. A **market structure** is an economic model that allows economists to examine competition among businesses in the same industry.

Perfect competition is the ideal model of a market economy. It is useful as a model, but real markets are never perfect. Economists assess how competitive a market is by determining where it falls short of perfect competition. Perfect competition has five characteristics.

1. **Numerous buyers and sellers.** No one seller or buyer has control over price.
2. **Standardized product.** Sellers offer a **standardized product**—a product that consumers consider identical in all essential features to other products in the same market.
3. **Freedom to enter and exit markets.** Buyers and sellers are free to enter and exit the market. No government regulations or other restrictions prevent a business or customer from participating in the market. Nor is a business or customer required to participate in the market.
4. **Independent buyers and sellers.** Buyers cannot join other buyers and sellers cannot join other sellers to influence prices.

QUICK REFERENCE

A **market structure** is an economic model of competition among businesses in the same industry.

Perfect competition is the ideal model of a market economy.

A **standardized product** is one that consumers see as identical regardless of producer.

5. **Well-informed buyers and sellers.** Both buyers and sellers are well-informed about market conditions. Buyers can do comparison shopping, and sellers can learn what their competitors are charging.

When these five conditions are met, sellers become price takers. A **price taker** is a business that cannot set the prices for its products but, instead, accepts the market price set by the interaction of supply and demand. Only efficient producers make enough money to serve perfectly competitive markets.

QUICK REFERENCE

A **price taker** is a business that accepts the market price determined by supply and demand.

CHARACTERISTIC 1 Many Buyers and Sellers

A large number of buyers and sellers is necessary for perfect competition so that no one buyer or seller has the power to control the price in the market. When there are many sellers, buyers can choose to buy from a different producer if one tries to raise prices above the market level. But because there are many buyers, sellers are able to sell their products at the market price.

Let's consider the Smith family, whom you met in Chapter 5. The Smiths grow raspberries in the summer to sell at the Montclair Farmers' Market. Because many farmers grow and sell raspberries at the same market, all of the farmers charge about the same price. If one farmer tries to charge more than the market price for raspberries, consumers will buy from the other farmers. Because there are many buyers—in other words, sufficient demand—the Smiths and other producers know that they can sell their product at the market price. Lack of demand will not cause them to lower their prices.

Perfect Competition Farmers' markets exhibit many of the characteristics of perfect competition.

CHARACTERISTIC 2 Standardized Product

In perfect competition, consumers consider one producer's product essentially the same as the product offered by another. The products are perfect substitutes. Agricultural products such as wheat, eggs, and milk, as well as other basic commodities such as notebook paper or gold generally meet this criterion.

Considering the Montclair Farmers' Market, while no two pints of raspberries are exactly alike, they are similar enough that consumers will choose to buy from any producer that offers raspberries at the market price. Price becomes the only basis for a consumer to choose one producer over another.

CHARACTERISTIC 3 Freedom to Enter and Exit Markets

In a perfectly competitive market, producers are able to enter the market when it is profitable and to exit when it becomes unprofitable. They can do this because the investment that a producer makes to enter a market is relatively low. Market forces alone encourage producers to freely enter or leave a given market.

The Smiths and other farmers consider the market price for raspberries when planning their crops. If they believe they can make a profit at that price, they grow raspberries. If not, they try some other crop.

Economics Update

Find an update about perfect competition at **ClassZone.com**

ECONOMICS ESSENTIALS

FIGURE 7.1 Characteristics of Perfect Competition

ANALYZE CHARTS

Imagine that you own a farm and that you have decided to sell raspberries at the Montclair Farmers' Market. Construct your own diagram to show how the five characteristics of perfect competition will apply to your enterprise.

CHARACTERISTIC 4 Independent Buyers and Sellers

In a perfectly competitive market, neither buyers nor sellers join together to influence price. When buyers and sellers act independently, the interaction of supply and demand sets the equilibrium price. Independent action ensures that the market will remain competitive. At the Montclair Farmers' Market, the farmers do not band together to raise prices, nor do the consumers organize to negotiate lower prices.

CHARACTERISTIC 5 Well-informed Buyers and Sellers

Buyers and sellers in a perfectly competitive market have enough information to make good deals. Buyers can compare prices among different sellers, and sellers know what their competitors are charging and what price consumers are willing to pay. Buyers and sellers at the Montclair Farmers' Market make informed choices about whether to buy or sell raspberries in that market. With all five characteristics met, the Smiths accept the market price for raspberries. All raspberry producers become price takers.

APPLICATION Making Inferences

A. Can you think of another market that comes close to perfect competition? Which of the characteristics does it lack?

Competition in the Real World

KEY CONCEPTS

In the real world, there are no perfectly competitive markets because real markets do not have all of the characteristics of perfect competition. Market structures that lack one of the conditions needed for perfect competition are examples of **imperfect competition**. (You'll learn more about imperfect competition in Sections 2 and 3.) However, there are some markets—the wholesale markets for farm products such as corn and beef, for example—that come close to perfect competition.

QUICK REFERENCE

Imperfect competition occurs in markets that have few sellers or products that are not standardized.

EXAMPLE 1 Corn

In the United States, there are thousands of farmers who grow corn, and each one contributes only a small percentage of the total crop. Therefore, no one farmer can control the price of corn, and all farmers accept the market price. Individual farmers decide only how much corn to produce to offer for sale at that price. At the same time, there are a large number of buyers, and the price on the wholesale market is easy to determine. Corn is a fairly standardized product, and buyers usually have no reason to prefer one farmer's corn to another's. Buyers will not pay more than the market price.

In reality, there are several reasons that imperfect competition occurs in the corn market. For one thing, the U.S. government pays subsidies to corn farmers to protect them from low corn prices. In addition, sometimes corn farmers band together to try to influence the price of corn in their favor, and corn buyers sometimes pursue the same strategy. Subsidies, group action, and other deviations from perfect competition interfere with the market forces of supply and demand.

Close to Perfect Competition
Wholesale markets for agricultural products, such as corn, come close to perfect competition.

EXAMPLE 2 Beef

The wholesale market for raw beef is another that comes close to perfect competition. There are many cattle producers, and there is little variation in a particular cut of beef from one producer to the next. Because the beef is so similar, the wholesale buyer's primary concern will be price. Both buyers and sellers can easily determine the market price, and producers sell all their beef at that price. Cattle sellers can adjust only their production to reflect the market price.

As in the corn market, there are several reasons that imperfect competition occurs in the beef market. Cattle ranchers, like corn farmers, may try to join together to influence the price of beef in their favor. In addition, many beef producers try to persuade buyers that there are significant differences in their products that warrant higher prices. For example, cattle that eat corn supposedly produce better tasting beef.

APPLICATION Drawing Conclusions

B. Why is the market for corn closer to perfect competition than the market for corn flakes?

For more information on creating and interpreting economic models, see the Skillbuilder Handbook, page R16.

Creating and Interpreting Economic Models

Economic models help solve problems by focusing on a limited set of variables. A production costs and revenue schedule, which you learned about in Chapter 5, is a model that helps businesses decide how much to produce. Creating a graph as part of the model paints a picture of the data that makes it easier to understand.

In this example, imagine you own a business that produces baseballs in a perfectly competitive market. The market price of a baseball is $1, but your costs vary depending on how many you produce. Follow the instructions to create a graph that will help you visualize the way a perfectly competitive market works.

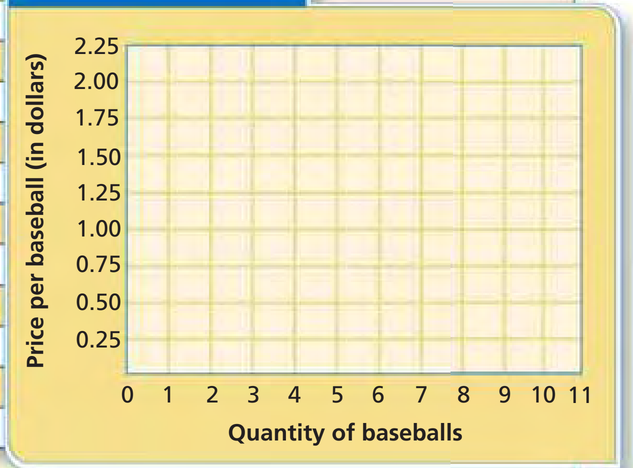
CREATING AN ECONOMIC MODEL OF BASEBALL PRODUCTION

1. Copy the graph below onto your own paper, or use SMARTGrapher @ ClassZone.com.
2. Using data from the table below, plot the curve showing the marginal costs of producing different numbers of baseballs. Label the curve "MC."
3. Using data from the table below, plot the curve showing the marginal revenue of producing different numbers of baseballs. Label the curve "MR."

BASEBALL PRODUCTION COSTS AND REVENUES SCHEDULE

Total Produced	Total Revenue (in dollars)	Total Cost (in dollars)	Total Profit (in dollars)	Marginal Revenue (in dollars)	Marginal Cost (in dollars)
0	0.00	1.00	21.00	—	—
1	1.00	2.00	21.00	1.00	1.00
2	2.00	2.80	20.80	1.00	0.80
3	3.00	3.50	20.50	1.00	0.70
4	4.00	4.00	0.00	1.00	0.50
5	5.00	4.50	0.50	1.00	0.50
6	6.00	5.20	0.80	1.00	0.70
7	7.00	6.00	1.00	1.00	0.80
8	8.00	6.86	1.14	1.00	0.86
9	9.00	7.86	1.14	1.00	1.00
10	10.00	9.36	0.64	1.00	1.50
11	11.00	11.50	20.50	1.00	2.14

BASEBALL PRODUCTION



THINKING ECONOMICALLY Analyzing

1. How many baseballs should you produce each day to maximize profits?
2. Using the same graph, plot the demand curve for this perfectly competitive market. Remember that the market price will not change no matter how many baseballs are demanded.
3. How does the graph help explain the term "price takers"?

SECTION 1 Assessment

REVIEWING KEY CONCEPTS

1. Explain the differences between the terms in each of these pairs:

a. *market*
market structure

b. *perfect competition*
imperfect competition

2. Why are sellers in a perfectly competitive market known as *price takers*?

3. Why is it necessary to have standardized products in order to have perfect competition?

4. Why is independent action of buyers and sellers important to achieving perfect competition?

5. How is imperfect competition different from perfect competition?

6. Using Your Notes What are the five characteristics of perfect competition? Refer to your completed cluster diagram.

Use the Graphic Organizer at
Interactive Review @ ClassZone.com

CRITICAL THINKING

7. Drawing Conclusions Suppose that you went to a farmers' market and found several different farmers selling cucumbers. Would you be likely to find a wide range of prices for cucumbers? Why or why not?

8. Analyzing Effects What would happen to a wheat farmer who tried to sell his wheat for $2.50 per bushel if the market price were $2.00 per bushel? Why?

9. Making Inferences Why are brand-name products not found in a perfectly competitive market? You will learn more about this topic in Section 3 of this chapter.

10. Challenge At an auction, sellers show their goods before an audience of buyers. The goods for sale may be similar to each other, as in an auction of used cars, or they may be one-of-a-kind, as in an art auction. Buyers usually have an opportunity to inspect items prior to the auction. During the auction, buyers bid against one another to see who is willing to pay the highest price. In what ways is an auction similar to a perfectly competitive market? In what ways is it different?

Online Quiz
ClassZone.com

ECONOMICS IN PRACTICE

How competitive is the market for snowboards?

Identifying Perfect Competition

Perfectly competitive markets can be identified by specific characteristics. The chart below lists these characteristics.

Characteristics of Perfect Competition	Markets				
	Applesauce	Snowboards	Hairbrushes	Computer games	Paper clips
Many buyers and sellers					
Standardized product					
Freedom to enter and leave the market					
Independent action					
Well-informed buyers and sellers					

Complete a Chart Five different markets are shown in the chart. On your own paper, complete the chart by marking which of the characteristics each market has.

Challenge Choose one market from the chart and explain what would need to be done to make it perfectly competitive.

SECTION 2

The Impact of Monopoly

OBJECTIVES

In Section 2, you will
- describe the characteristics of a monopoly
- analyze four different types of monopolies and discuss how they come about
- explain how a monopoly sets its prices and production goals

KEY TERMS

monopoly, *p. 198*
cartel, *p. 198*
price maker, *p. 198*
barrier to entry, *p. 198*
natural monopoly, *p. 201*
government monopoly, *p. 201*
technological monopoly, *p. 201*
geographic monopoly, *p. 201*
economies of scale, *p. 201*
patent, *p. 202*

TAKING NOTES

As you read Section 2, complete a chart to show how different types of monopolies exhibit the characteristics of monopoly. Use the Graphic Organizer at **Interactive Review @ ClassZone.com**

	One Seller	Restricted Market	Control of Prices
Natural Monopoly			
Government Monopoly			
Technological Monopoly			
Geographic Monopoly			

Characteristics of a Monopoly

KEY CONCEPTS

Perfect competition is the most competitive market structure. The least competitive is **monopoly**, a market structure in which only one seller sells a product for which there are no close substitutes. The term *monopoly* may be used for either the market structure or the monopolistic business. Pure monopolies are as rare as perfect competition, but some businesses come close. For example, a **cartel** is a formal organization of sellers or producers that agree to act together to set prices and limit output. In this way, a cartel may function as a monopoly.

Because a monopoly is the only seller of a product with no close substitutes, it becomes a **price maker**, a business that does not have to consider competitors when setting its prices. Consumers either accept the seller's price or choose not to buy the product. Other firms may want to enter the market, but they often face a **barrier to entry**—something that hinders a business from entering a market. Large size, government regulations, or special resources or technology are all barriers to entry.

Let's take a closer look at the three characteristics of monopoly through the De Beers cartel, which held a virtual monopoly on the diamond market for most of the 20th century. At one time it controlled as much as 80 percent of the market in uncut diamonds. De Beers used its monopoly power to control the price of diamonds and created barriers to entry that kept other firms from competing.

QUICK REFERENCE

Monopoly occurs when there is only one seller of a product that has no close substitutes.

A **cartel** is a group that acts together to set prices and limit output.

A **price maker** is a firm that does not have to consider competitors when setting the prices of its products.

A **barrier to entry** makes it hard for a new business to enter a market.

ECONOMICS ESSENTIALS

FIGURE 7.2 Characteristics of a Monopoly

What Are the Characteristics of a Monopoly?

Only One Seller
A single business controls the supply of a product that has no close substitutes.

Control of Prices
Monopolies act as price makers because they sell products that have no close substitutes and they face no competition.

Restricted, Regulated Market
Government regulations or other barriers to entry keep other firms out of the market.

ANALYZE CHARTS

Imagine that you are a business person with unlimited funds. Could you gain a monopoly over the market for housing in your neighborhood? Using the chart, explain the steps you would need to take. How might your neighborhood change if one person controlled property prices?

CHARACTERISTIC 1 Only One Seller

In a monopoly, a single business is identified with the industry because it controls the supply of a product that has no close substitutes. For example, De Beers once produced more than half of the world's diamond supply and bought up diamonds from smaller producers to resell. In this way, it controlled the market.

CHARACTERISTIC 2 A Restricted, Regulated Market

In some cases, government regulations allow a single firm to control a market, such as a local electric utility. In the case of De Beers, the company worked with the South African government to ensure that any new diamond mines were required to sell their diamonds through De Beers. The company also restricted access to the market for raw diamonds for producers outside of South Africa. By controlling the supply of diamonds, De Beers made it difficult for other producers to make a profit.

CHARACTERISTIC 3 Control of Prices

Monopolists can control prices because there are no close substitutes for their product and they have no competition. When economic downturns reduced demand for diamonds, De Beers created artificial shortages by withholding diamonds from the market. The reduced supply allowed the cartel to continue charging a higher price.

APPLICATION Analyzing Effects

A. What effect did the De Beers diamond monopoly have on the price of diamonds?

A GLOBAL PERSPECTIVE

OPEC: Controlling the Oil Pipelines

The Organization of the Petroleum Exporting Countries (OPEC) does not have a monopoly on oil reserves or oil production. However, the 11 member nations of the cartel possess more than two-thirds of the world's oil reserves and produce about two-fifths of the world's oil supply. By regulating the amount of oil that flows through its pipelines, OPEC exerts control over the market price for oil.

Market forces often counteract OPEC's supply adjustments. For example, in the early 1980s demand for oil fell as consumers and businesses implemented strategies to reduce energy use. Despite OPEC's efforts to reduce supply and stabilize the price, crude oil prices fell through most of the 1980s. Another factor that limits OPEC's control over oil prices is member unity. Members sometimes choose not to follow OPEC moves to reduce oil output—because that would reduce their revenues. Despite these limitations, OPEC continues to play a major role in the world market for petroleum.

FIGURE 7.3 OPEC MEMBERS

Country	Joined OPEC	Location
Algeria	1969	Africa
Indonesia	1962	Asia
Iran	1960	Middle East
Iraq	1960	Middle East
Kuwait	1960	Middle East
Libya	1962	Africa
Nigeria	1971	Africa
Qatar	1961	Middle East
Saudi Arabia	1960	Middle East
United Arab Emirates	1967	Middle East
Venezuela	1960	South America

Source: OPEC

FIGURE 7.4 OPEC Member Nations

CONNECTING ACROSS THE GLOBE

1. **Applying Economic Concepts** In what ways does OPEC act like a monopoly?
2. **Making Inferences** What will happen to OPEC's monopolistic power as the world discovers new sources of energy? Explain your answer.

Types of Monopolies

KEY CONCEPTS

There are several reasons why monopolies exist, and not all monopolies are harmful to consumers. A **natural monopoly** is a market situation in which the costs of production are lowest when only one firm provides output. A **government monopoly** is a monopoly that exists because the government either owns and runs the business or authorizes only one producer. A **technological monopoly** is a monopoly that exists because the firm controls a manufacturing method, an invention, or a type of technology. A **geographic monopoly** is a monopoly that exists because there are no other producers or sellers within a certain region.

QUICK REFERENCE

A **natural monopoly** occurs when the costs of production are lowest with only one producer.

A **government monopoly** exists when the government either owns and runs the business or authorizes only one producer.

A **technological monopoly** occurs when a firm controls a manufacturing method, invention, or type of technology.

A **geographic monopoly** exists when there are no other producers within a certain region.

Economies of scale occur when the average cost of production falls as the producer grows larger.

EXAMPLE 1 Natural Monopoly: A Water Company

In some markets, it would be inefficient to have more than one company competing for consumers' business. Most public utilities fall into this category. Let's look at the water company in your community as an example. It pumps the water from its source through a complex network of pipes to all the homes, businesses, and public facilities in the community. It also monitors water quality for safety and removes and treats wastewater so that it may be recycled.

It would be a waste of community resources to have several companies developing separate, complex systems in order to compete for business. A single supplier is most efficient due to **economies of scale**, a situation in which the average cost of production falls as the producer grows larger. The more customers the water company serves, the more efficient its operation becomes, as its high fixed costs are spread out over a large number of buyers. These economies of scale result in government support for natural monopolies. While supporting natural monopolies, the government also regulates them to ensure that they do not charge excessively high prices for their services.

Natural Monopolies
Most public utilities require complex systems, such as this water treatment facility.

EXAMPLE 2 Government Monopoly: The Postal Service

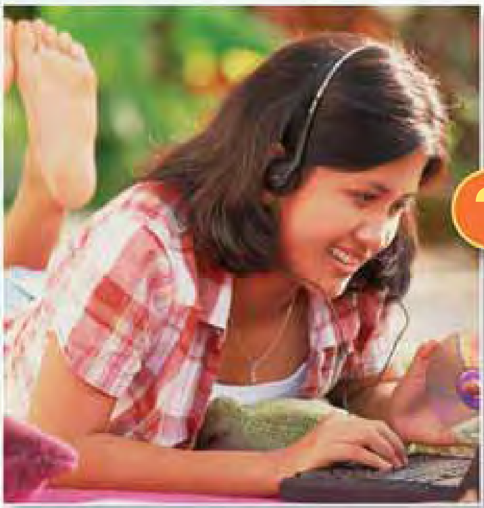
Government-run businesses provide goods and services that either could not be provided by private firms or that are not attractive to them because of insufficient profit opportunities. One of the oldest government monopolies in the United States is the U.S. Postal Service, which has the exclusive right to deliver first-class mail. Originally, only the government could provide this service in an efficient and cost-effective manner. However, new services and new technologies have been chipping away at this monopoly. Private delivery companies offer services that compete with the U.S. Postal Service. Many people now send information by fax, e-mail, and text messages. In addition, many pay their bills online.

YOUR ECONOMIC CHOICES

GOVERNMENT MONOPOLY

Which mail service will you choose?

If you need to send thank-you notes, you could send them by regular mail, which is a government monopoly. Or you could send electronic thank-you notes by computer.



▲ E-mail message

▲ Handwritten note

EXAMPLE 3 Technological Monopoly: Polaroid

In 1947, Edwin Land, the founder of the Polaroid Corporation, invented the first instant camera. Land's camera used a special type of film that allowed each picture to develop automatically in about a minute. Through a series of patents, Polaroid created a monopoly in the instant photography market.

A **patent** is a legal registration of an invention or a process that gives the inventor the exclusive property rights to that invention or process for a certain number of years. The government supports technological monopolies through the issuing of patents. Through patents, businesses are able to recover the costs that were involved in developing the invention or technology.

QUICK REFERENCE

A **patent** gives an inventor the exclusive property rights to that invention or process for a certain number of years.

Polaroid's control of instant photography technology through its patents was a barrier to entry for other firms. In 1985, Polaroid won a lawsuit against Eastman Kodak Company for patent infringement. The court ruled that Kodak's instant camera and film had violated Polaroid's property rights, which were protected by several patents. The lawsuit effectively blocked Kodak from the instant photography market.

Technological monopolies last only as long as the patent—generally 20 years—or until a new technology creates close substitutes. The rise of easier-to-use 35mm cameras, one-hour photo processing, and digital cameras all contributed to a steep decline in Polaroid's business. While the company remains the leading seller of instant cameras and film, the technology has become a minor segment of the consumer photography market.

Technological Monopoly Polaroid instant cameras use patented technology.

EXAMPLE 4 Geographic Monopoly: Professional Sports

One type of geographic monopoly in the United States is the professional sports team. The major sports leagues require that teams be associated with a city or region and limit the number of teams in each league. In other words, the leagues create a restricted market for professional sports. Most cities and towns are not directly represented by a team, so many teams draw their fans from a large surrounding geographic region. Because of their geographic monopolies, the owners of these teams are able to charge higher prices for tickets to games than if they faced competition. They also have a ready market for sports apparel and other merchandise featuring the team logo and colors.

Geographic Monopolies The Boston Red Sox is the only baseball team in New England, so it draws fans from across the six-state region.

Another type of geographic monopoly is created by physical isolation. For example, Joe operates the only gas station at an interstate exit in the middle of a desert. The next station in either direction is more than 50 miles away. Joe has a geographic monopoly because he is the only supplier of a product with no close substitutes. Drivers on the interstate in that area depend on Joe's gas and have no other choice of supplier. They can either buy gas from Joe or risk running out of gas before they reach the next station. Because of his geographic location as the single supplier of a product that has no close substitutes, Joe is able to control the price that he charges—and gas at Joe's is always very expensive.

Isolated locations or small communities may have other examples of geographic monopolies if the market is too small to support two similar businesses. Geographic monopolies have become less common in the United States. Cars allow people to travel greater distances to shop, and catalog marketers and Internet businesses, combined with efficient delivery companies, offer consumers more alternatives to shopping at local stores.

Economics Update

Find an update on monopolies at **ClassZone.com**

APPLICATION Drawing Conclusions

B. Which type of monopoly do you think is least harmful to consumers? Why?

Profit Maximization by Monopolies

KEY CONCEPTS

Although a monopoly firm is the only supplier in its market, the firm cannot charge any price it wishes. A monopolist still faces a downward-sloping demand curve. In other words, the monopoly will sell more at lower prices than at higher prices. The monopolist controls price by controlling supply. A monopoly produces less of a product than would be supplied in a competitive market, thereby artificially raising the equilibrium price.

It's difficult to study this process in the real world because most countries have laws to prevent monopolies. We have to look at small instances in which a company has a monopoly over one particular specialized product. Such a limited monopoly lasts only for the life of the patent or until a competitor develops a similar product.

EXAMPLE Drug Manufacturer

Pharmaceutical manufacturers offer an example of how companies with limited monopolies try to maximize their profits. On average, drug patents last for about 11 years in the United States. Drug companies try to maximize their profits during that period because when the patent expires they face competition from other manufacturers who begin marketing generic versions of the drug. A generic drug contains the same ingredients and acts in the same way as the patented drug, but it is sold at much lower prices.

"NOW HERE'S MY IDEA... WE COME UP WITH A REALLY HIGH-PRICED DRUG to TREAT DRUG SIDE EFFECTS...!"

As an example, consider the Schering-Plough company and its antihistamine Claritin. The drug was originally approved for use as a prescription medication in the United States in 1993, although it had been patented earlier. Unlike many other such drugs, Claritin did not make users drowsy. This advantage, combined with a strong marketing campaign, led Claritin to become a top seller, making as much as $3 billion in annual worldwide sales.

When the patent on Claritin expired in 2002, numerous generic equivalents entered the market. In response, Schering-Plough lowered Claritin's price and gained approval for a nonprescription form of the drug. But sales of Claritin fell to about $1 billion as consumers switched to less costly generic equivalents.

APPLICATION Applying Economic Concepts

C. Using the three characteristics of monopoly, explain what happened to the market for Claritin when its patent expired.

SECTION 2 Assessment

Online Quiz
ClassZone.com

REVIEWING KEY CONCEPTS

1. Explain the differences between the terms in each of these pairs:
   a. *monopoly* / *cartel* **b.** *natural monopoly* / *geographic monopoly* **c.** *technological monopoly* / *government monopoly*

2. What is the relationship between economies of scale and a natural monopoly?

3. How does a patent awarded to one company act as a barrier to entry to another company wishing to enter the same market?

4. Why is a monopolist a price maker rather than a price taker?

5. Why do technological monopolies exist only for a limited time?

6. **Using Your Notes** Why is a geographic monopoly able to control the price of its product? Refer to your completed chart.

   Use the Graphic Organizer at **Interactive Review @ ClassZone.com**

	One Seller	Restricted Market	Control of Prices
Natural Monopoly			
Government Monopoly			
Technological Monopoly			
Geographic Monopoly			

CRITICAL THINKING

7. **Analyzing Causes and Effects** Companies that produce generic drugs are not required to repeat the clinical tests that the original manufacturer of the drug is required to run before the drug receives its patent. How does this fact affect the prices of generic drugs and why?

8. **Analyzing Effects** A powerful monopoly is broken up into several smaller, competing companies. What are the costs and benefits for the general public?

9. **Drawing Conclusions** In 2003, 95 percent of the households in America had access to only one cable TV company in their area. What kind of monopoly did cable TV companies have? Explain your answer.

10. **Challenge** Among the drugs to fight high cholesterol, the most effective are known as statins. The drugs are similar, but each is different enough to have its own patent. In 2005, there were seven such drugs on the market. In 2006, the patents ended for two of the drugs. What effect did this have on the entire category of statin drugs, including those whose patents were still in effect through 2006? Explain why this might be the case.

ECONOMICS IN PRACTICE

Identifying Types of Monopolies

You learned in this section that there are four types of monopolies: natural, government, technological, and geographical.

What Type? The table below lists examples of several monopolies. For each example, identify the type of monopoly. Some types have more than one example.

Example of Monopoly	Type of Monopoly
U.S. interstate highway system	
Electric utility company	
The only bank in a small town	
The company that received a patent for the Frisbee	
A city's public transportation system	
Natural gas company	

Challenge In which type of monopoly is the government least likely to be involved? Give reasons for your answer.

SECTION 3

Other Market Structures

OBJECTIVES

In Section 3, you will

- learn that monopolistic competition and oligopoly are market structures that fall between perfect competition and monopoly
- identify the characteristics of monopolistic competition
- describe the characteristics of oligopoly

KEY TERMS

monopolistic competition, *p. 206*
product differentiation, *p. 206*
nonprice competition, *p. 207*
focus group, *p. 208*
oligopoly, *p. 209*
market share, *p. 209*
start-up costs, *p. 209*

TAKING NOTES

As you read Section 3, complete a chart to compare and contrast monopolistic competition and oligopoly. Use the Graphic Organizer at **Interactive Review @ ClassZone.com**

Monopolistic Competition	Oligopoly

Characteristics of Monopolistic Competition

QUICK REFERENCE

Monopolistic competition occurs when many sellers offer similar, but not standardized, products.

Product differentiation is the effort to distinguish a product from similar products.

KEY CONCEPTS

Most markets in the real world fall somewhere between the models of perfect competition and monopoly. One of the most common market structures is **monopolistic competition,** in which many sellers offer similar, but not standardized, products. The market for T-shirts printed with images or slogans is one example. The market is competitive because there are many buyers (you, your friends, and many other buyers) and many sellers (stores at the mall, online merchants, sports teams, and many other sellers). The market is monopolistic because each seller has influence over a small segment of the market with products that are not exactly like those of their competitors. Someone looking for a pink T-shirt with fuzzy kittens would not accept a black monster-truck rally T-shirt as a close substitute.

Product differentiation and nonprice competition are the distinguishing features of monopolistic competition. **Product differentiation** is the attempt to distinguish a product from similar products. Sometimes, the effort focuses on substantial differences between products, such as vehicle gas mileage ratings.

But companies also try to differentiate their products when there are few real differences between products. For example, a battery company might spend millions of dollars on advertising to convince consumers that their batteries last longer than other batteries—even though the real difference in longevity may be minimal.

Another way companies in monopolistic competitive markets try to gain business is through nonprice competition. **Nonprice competition** means using factors other than low price—such as style, service, advertising, or giveaways—to try to convince customers to buy one product rather than another. If you've ever decided to eat at a particular fast food restaurant just to get the cool gizmo it's giving away, you have participated in nonprice competition.

Monopolistic competition has four major characteristics: many buyers for many sellers, similar but differentiated products, limited lasting control over prices, and freedom to enter or exit the market. Let's take a closer look at each of these characteristics by focusing on the market for hamburgers.

QUICK REFERENCE

Nonprice competition occurs when producers use factors other than low price to try to convince customers to buy their products.

CHARACTERISTIC 1 Many Sellers and Many Buyers

In monopolistic competition there are many sellers and many buyers. The number of sellers is usually smaller than in a perfectly competitive market but sufficient to allow meaningful competition. Sellers act independently in choosing what kind of product to produce, how much to produce, and what price to charge.

When you want a hamburger, you have many different restaurants from which to choose. The number of restaurants assures that you have a variety of kinds of hamburgers to choose from and that prices will be competitive. No single seller has a large enough share of the market to significantly control supply or price.

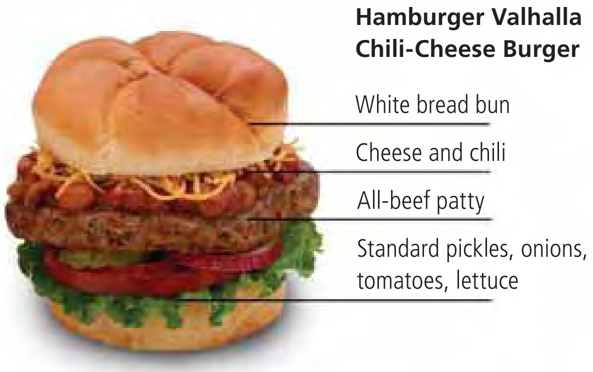
However, there are probably a few restaurants that make burgers you really like and others with burgers you really don't like. The restaurants that make your favorite burgers have a sort of monopoly on your business.

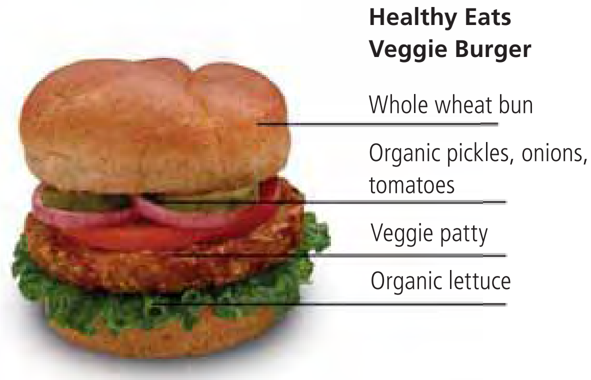
Economics Update

Find an update about monopolistic competition at **ClassZone.com**

CHARACTERISTIC 2 Similar but Differentiated Products

Sellers in monopolistic competition gain their limited monopoly-like power by making a distinctive product or by convincing consumers that their product is different from the competition. Hamburger restaurants might advertise the quality of their ingredients or the way they cook the burger. They might also use distinctive packaging or some special service—a money-back guarantee if the customer is not satisfied with the meal, for example. One key method of product differentiation is the use of brand names, which





encourage consumer loyalty by associating certain desirable qualities with a particular brand of hamburger. Producers use advertising to inform consumers about product differences and to persuade them to choose their offering.

How do hamburger restaurants decide how to differentiate their products? They conduct market research, the gathering and evaluation of information about consumer preferences for goods and services. For local restaurants, market research may be limited to listening to their customers' praise or complaints and paying attention to what competing restaurants offer.

QUICK REFERENCE

A **focus group** is a moderated discussion with small groups of consumers.

The large chain restaurants can afford to use more sophisticated research techniques to gain information about consumers' lifestyles and product preferences. One technique is the **focus group**—a moderated discussion with small groups of consumers. Another market research technique is the survey, in which a large number of consumers are polled, one by one, on their opinions. The results of market research help the restaurants differentiate their hamburgers and attract more customers.

CHARACTERISTIC 3 Limited Control of Prices

Product differentiation gives producers limited control of price. Hamburger restaurants charge different prices for their product depending on how they want to appeal to customers. The price of some hamburgers is set as low as possible to appeal to parents of younger eaters or to those on tight budgets. Prices for name-brand hamburgers or burgers with better quality ingredients may be set slightly higher. If consumers perceive that the differences are important enough, they will pay the extra price to get the hamburger they want.

Yet producers in monopolistic competition also know that there are many close substitutes for their product. They understand the factors that affect demand and recognize that consumers will switch to a substitute if the price goes too high.

Ease of Entry and Exit In monopolistic competition, sellers may enter and exit the market freely.

CHARACTERISTIC 4 Freedom to Enter or Exit Market

There are generally no huge barriers to entry in monopolistically competitive markets. It does not require a large amount of capital for someone to open a hamburger stand, for example. When firms earn a profit in the hamburger market, other firms will enter and increase competition. Increased competition forces firms to continue to find ways to differentiate their products. The competition can be especially intense for small businesses facing much larger competitors.

Some firms will not be able to compete and will start to take losses. This is the signal that it is time for those firms to exit the market. Leaving the restaurant market is relatively easy. The owners sell off the cooking equipment, tables, and other supplies at a discount. If their finances are solid, they may then look for another market where profits might be made.

APPLICATION Applying Economic Concepts

A. Think about an item of clothing that you purchased recently. How did the seller differentiate the product? List several ways, then compare lists with a classmate.

Characteristics of an Oligopoly

KEY CONCEPTS

Oligopoly (OL-ih-GOP-ah-lee), a market structure in which only a few sellers offer a similar product, is less competitive than monopolistic competition. In an oligopoly, a few large firms have a large **market share**—percent of total sales in a market—and dominate the market. For example, if you want to see a movie in a theater, chances are the movie will have been made by one of just a few major studios. What's more, the theater you go to is probably part of one of just a few major theater chains. Both the market for film production and the market for movie theaters are oligopolies.

There are few firms in an oligopoly because of high **start-up costs**—the expenses that a new business must pay to enter a market and begin selling to consumers. Making a movie can be expensive, especially if you want to make one that can compete with what the major studios produce. And getting it into theaters across the country requires a huge network of promoters and distributors—and even more money.

An oligopoly has four major characteristics. There are few sellers but many buyers. In industrial markets, sellers offer standardized products, but in consumer markets, they offer differentiated products. The few sellers have more power to control prices than in monopolistic competition, but to enter or exit the market is difficult.

QUICK REFERENCE

Oligopoly is a market structure in which only a few sellers offer a similar product.

Market share is a company's percent of total sales in a market.

Start-up costs are the expenses that a new business faces when it enters a market.

CHARACTERISTIC 1 Few Sellers and Many Buyers

In an oligopoly, a few firms dominate an entire market. There is not a single supplier as in a monopoly, but there are fewer firms than in monopolistic competition. These few firms produce a large part of the total product in the market. Economists consider an industry to be an oligopoly if the four largest firms control at least 40 percent of the market. About half of the manufacturing industries in the United States are oligopolistic.

The breakfast cereal industry in the United States is dominated by four large firms that control about 80 percent of the market. Your favorite cereal is probably made by one of the big four manufacturers. Although they offer many varieties of cereals, there is less competition than there would be if each variety were produced by a different, smaller manufacturer.

The Breakfast Cereal Industry
Just a few large companies produce the majority of breakfast cereals available.

CHARACTERISTIC 2 Standardized or Differentiated Products

Depending on the market, an oligopolist may sell either standardized or differentiated products. Many industrial products are standardized, and a few large firms control these markets. Examples include the markets for steel, aluminum, and flat glass. When products are standardized, firms may try to differentiate themselves based on brand name, service, or location.

Breakfast cereals, soft drinks, and many other consumer goods are examples of differentiated products sold by oligopolies. Oligopolists market differentiated products using marketing strategies similar to those used in monopolistic competition. They use surveys, focus groups, and other market research techniques to find out what you like. The companies then create brand-name products that can be marketed across the country or around the world.

CHARACTERISTIC 3 More Control of Prices

Because there are few sellers in an oligopoly, each one has more control over product price than in a monopolistically competitive market. For example, each breakfast cereal manufacturer has a large enough share of the market that decisions it makes about supply and price affect the market as a whole. Because of this, a seller in an oligopoly is not as independent as a seller in monopolistic competition. A decision made by one seller may cause the other sellers to respond in some way.

Economics Update
Find an update about oligopolies at **ClassZone.com**

For example, if one of the leading breakfast cereal manufacturers lowers its prices, the other manufacturers will probably also lower prices rather than lose customers to the competition. Therefore, no firm is likely to gain market share based on price, and all risk losing profits. But if one manufacturer decides to raise prices, the others may not follow suit, in order to take customers and gain market share. Consequently, firms in an oligopoly try to anticipate how their competitors will respond to their actions before they make decisions on price, output, or marketing.

CHARACTERISTIC 4 Little Freedom to Enter or Exit Market

Start-up costs for a new company in an oligopolistic market can be extremely high. Entering the breakfast cereal industry on a small scale is not very expensive—but the profits are low too. The factories, warehouses, and other infrastructure needed to compete against the major manufacturers require large amounts of funds. In addition, existing manufacturers may hold patents that act as further barriers to entry.

Firms in an oligopoly have established brands and plentiful resources that make it difficult for new firms to enter the market successfully. For example, breakfast cereal manufacturers have agreements with grocery stores that guarantee them the best shelf space. Existing manufacturers also have economies of scale that help them to keep their expenses low. Smaller firms, with smaller operations, lack the economies of scale.

High Start-up Costs New firms may not have the funds to construct large factories.

However, all of the investments by firms in an oligopoly make it difficult for them to exit the market. When a major breakfast cereal manufacturer begins losing money, its operations are too vast and complex to sell and reinvest easily, as a small business might. It must trim its operations and work to stimulate demand for its product.

APPLICATION Categorizing Information

B. Which of these products produced by oligopolies are standardized and which are differentiated: automobiles, cement, copper, sporting goods, tires?

Comparing Market Structures

KEY CONCEPTS

Each of the four market structures has different benefits and problems. And each type creates a different balance of power—namely, the power to influence prices—between producers and consumers.

Consumers get the most value in markets that approach perfect competition. No actual markets are perfectly competitive, but in those that come close, prices are set primarily by supply and demand. However, such markets usually deal in a standardized product, so consumers have little choice other than the best price.

In monopolistic competition, consumers continue to benefit from companies competing for their business. But businesses gain some control over prices, so they are more likely to earn a profit. Opening a business in such a market is usually relatively affordable, which is another benefit for businesses.

In markets dominated by oligopolies, consumer choices may be more limited than in more competitive markets. Businesses in such markets gain more control of price, making it easier for them to make a profit. However, the cost of doing business in such a market is high.

A market ruled by a monopoly is very favorable for the business that holds the monopoly. It faces little or no competition from other companies. And monopoly gives consumers the least influence over prices. They decide only whether they are willing to buy the product at the price set by the monopolist.

FIGURE 7.5 Comparing Market Structures

	Number of Sellers	Type of Product	Sellers' Control over Prices	Barriers to Enter or Exit Market
Perfect Competition	Many	Standardized	None	Few
Monopolistic Competition	Many	Similar but differentiated	Limited	Few
Oligopoly	Few	Standardized for industry; differentiated for consumers	Some	Many
Monopoly	One	Standardized, but no close substitutes	Significant	Very many—market restricted or regulated

ANALYZE CHARTS

1. If you were starting a business, which market structures would make it easiest for you to enter the market?
2. Which market structures offer the highest potential profits? Why?

APPLICATION Drawing Conclusions

C. What difference does it make to consumers whether a market is ruled by monopolistic competition or by an oligopoly?

ECONOMICS PACESETTER

Joan Robinson: Challenging Established Ideas

FAST FACTS

Joan Robinson

Career: Economics professor, Cambridge University

Born: October 31, 1903

Died: August 5, 1983

Major Accomplishment: Developed theory of imperfect competition

Books: *The Economics of Imperfect Competition* (1933), *The Accumulation of Capital* (1956), *Economic Philosophy* (1963), *Introduction to Modern Economics* (1973)

Famous Quotation: "*It is the business of economists, not to tell us what to do, but show why what we are doing anyway is in accord with proper principles.*"

Economics Update

Learn more about Joan Robinson at **ClassZone.com**

In this section, you learned about monopolistic competition and oligopoly. British economist Joan Robinson was one of the first to write about these market structures. As strange as it may seem to us now, most economists before 1930 described market competition only in terms of the extremes of perfect competition and monopoly.

Explaining Real-World Competition

In 1933, Joan Robinson challenged the prevailing ideas about competition. Her first major book, *The Economics of Imperfect Competition,* described market structures that existed between monopoly and perfect competition. Robinson's work appeared shortly after Harvard economist Edward Chamberlin published his book *Theory of Monopolistic Competition.* The two economists had developed their ideas independently.

Robinson and Chamberlin described the type of competition that exists among firms with differentiated products. Such firms gain more control over the price of their product, but their control is limited by the amount of competition. They also described the nature of oligopoly and of monopsony, a market structure in which there are many sellers but only one large buyer.

Robinson continued to contribute important ideas throughout her long career in economics. Her theory of imperfect competition remains a key element of the field of microeconomics today. Economists recognized that Robinson's theory more accurately reflected modern market economies in which firms compete through product differentiation and advertising and in which many industries are controlled by oligopolies.

Joan Robinson developed the theory of imperfect competition.

APPLICATION Making Inferences

D. Why do you think Joan Robinson chose the term *imperfect competition* to describe the nature of most real-world markets?

SECTION 3 Assessment

Online Quiz
ClassZone.com

REVIEWING KEY CONCEPTS

1. Explain the relationship between the terms in each of these pairs:
   a. *product differentiation* / *nonprice competition*
   b. *focus group* / *market share*
   c. *oligopoly* / *start-up costs*
2. How is monopolistic competition similar to perfect competition and how is it similar to monopoly?
3. Describe some of the techniques sellers use to differentiate their products.
4. Why are standardized products sometimes found in oligopoly but not in monopolistic competition?
5. Is it easier for a new firm to enter the market under monopolistic competition or oligopoly? Why?
6. **Using Your Notes** How does the number of sellers compare in monopolistic competition and oligopoly? Refer to your completed chart.

Monopolistic Competition	Oligopoly

Use the Graphic Organizer at
Interactive Review @ ClassZone.com

CRITICAL THINKING

7. **Contrasting Economic Information** What makes the market for wheat different from the markets for products made from wheat, such as bread, cereal, and pasta?
8. **Applying Economic Concepts** In 2005, a major U.S. automaker announced a new discount plan for its cars for the month of June. It offered consumers the same price that its employees paid for new cars. When the automaker announced in early July that it was extending the plan for another month, the other two major U.S. automakers announced similar plans. What market structure is exhibited in this story and what specific characteristics of that market structure does it demonstrate?
9. **Analyzing Effects** Blue jeans are produced under monopolistic competition, so their prices are higher than if they were produced under perfect competition. Do the positive effects for consumers of blue jeans justify the higher prices? Why or why not?
10. **Challenge** Why do manufacturers of athletic shoes spend money to sign up professional athletes to wear and promote their shoes rather than differentiating their products strictly on the basis of physical characteristics such as design and comfort?

ECONOMICS IN PRACTICE


Perfect competition or monopoly?

The Impact of Market Structure
Each of the four market structures carries different consequences for businesses and consumers. Imagine what would happen if there were only one type of market structure. Use Figure 7.5 on page 211 as a guide as you do this exercise.

a. What would your town look like if every market was perfectly competitive? What would happen to your consumer choices?

b. What would happen if every market was ruled by monopolistic competition?

c. What would the town look like if oligopolies controlled every market?

d. What if every market in your town was ruled by a monopoly? How could you tell the difference between situation A and D?

Challenge Now think about what your town actually looks like. What types of market structures are most prevalent? Are you satisfied with the mix of market structures, or do you think some markets would be better served by different structures?

SECTION 4

Regulation and Deregulation Today

OBJECTIVES

In Section 4, you will

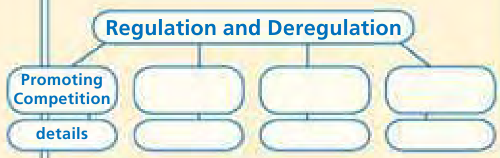
- explain how government acts to prevent monopolies
- analyze the effects of anti-competitive business practices
- describe how government acts to protect consumers
- discuss why some industries have been deregulated and the results of that deregulation

KEY TERMS

regulation, *p. 214*
antitrust legislation, *p. 214*
trust, *p. 214*
merger, *p. 214*
price fixing, *p. 216*
market allocation, *p. 216*
predatory pricing, *p. 216*
cease and desist order, *p. 217*
public disclosure, *p. 217*
deregulation, *p. 218*

TAKING NOTES

As you read Section 4, complete a hierarchy diagram to track main ideas and supporting details. Use the Graphic Organizer at **Interactive Review@ ClassZone.com**



Promoting Competition

KEY CONCEPTS

The forces of the marketplace generally keep businesses competitive with one another and attentive to consumer welfare. But sometimes the government uses **regulation**—controlling business behavior through a set of rules or laws—to promote competition and protect consumers. The most important laws that promote competition are collectively called **antitrust legislation**, laws that define monopolies and give government the power to control them and break them up. A **trust** is a group of firms combined for the purpose of reducing competition in an industry. (A trust is similar to a cartel, which you learned about in Section 2.) To keep trusts from forming, the government regulates business mergers. A **merger** is when one company combines with or purchases another to form a single firm.

QUICK REFERENCE

Regulation is a set of rules or laws designed to control business behavior.

Antitrust legislation defines monopolies and gives government the power to control them.

A **trust** is a group of firms combined in order to reduce competition in an industry.

A **merger** is the joining of two firms to form a single firm.

Standard Oil Company This cartoon dramatizes how Standard Oil controlled the oil industry.

Origins of Antitrust Legislation

During the late 1800s, a few large trusts, such as Standard Oil, dominated the oil, steel, and railroad industries in the United States. The U.S. government became concerned that these combinations would use their power to control prices and output. As a result, in 1890, the government passed the Sherman

Antitrust Act. This gave government the power to control monopolies and to regulate business practices that might reduce competition. Over time, other laws strengthened the government's ability to regulate business and to encourage competition.

To understand why government officials pushed for antitrust laws, consider one of the trusts that developed in the late 1800s—the Standard Oil Company. By merging with other companies and eliminating competitors, Standard Oil gained control of about 90 percent of the U.S. oil industry. Such a huge holding, government officials contended, gave Standard Oil the ability to set production levels and prices. In 1911, the U.S. government won a court case under the Sherman Antitrust Act that required the breakup of the trust. In order to increase competition, Standard Oil was forced to relinquish control of 33 companies that had once been part of the trust.

Antitrust Legislation Today

At various times, the U.S. government has used antitrust legislation to break up large companies that attempt to maintain their market power through restraint of competition. The government might allow a large dominant firm to remain intact because it is the most efficient producer. Or it might order that the company change its business practices to allow other firms to compete more easily.

The responsibility for enforcing antitrust legislation is shared by the Federal Trade Commission (FTC) and the Department of Justice. A major focus of their work is the assessment of mergers. The government tends to support mergers that might benefit consumers. For example, larger firms are often able to operate more efficiently, and lower operating costs may lead to lower prices for consumers. On the other hand, the government tends to block mergers that lead to greater market concentration in the hands of a few firms. A merger that makes it more difficult for new firms to enter a market will also be looked upon with concern.

To evaluate a potential merger, the government looks at how a particular market is defined. A company that is proposing a merger would try to define its market as broadly as possible, in order to make its control of the market seem smaller. For example, a soft drink producer might claim that its market competition includes all beverages, such as water, tea, coffee, and juice.

To determine whether the merger will increase the concentration in the market and decrease competition, the government considers the market share of the firms before and after the proposed merger. Government regulators also look at whether the merger allows a firm to eliminate possible competitors. If this analysis shows that a merger will reduce competition and more than likely lead to higher prices for consumers, the regulators will deny the companies' effort to merge.

The Federal Trade Commission (FTC)
In 2004, Deborah Platt Majoras became head of the FTC, an agency that enforces antitrust laws.

APPLICATION Drawing Conclusions

A. Which of these mergers would the government be more likely to approve and why: two airlines that serve different cities or two banks in a small town?

Ensuring a Level Playing Field

KEY CONCEPTS

In addition to evaluating mergers, the government also tries to make sure that businesses do not engage in practices that would reduce competition. As you have learned, competition enables the market economy to work effectively. When businesses take steps that counteract the effects of competition, prices go up and supplies go down. In the United States, laws prohibit most of these practices. The FTC and the Department of Justice enforce these laws.

Prohibiting Unfair Business Practices

Businesses that seek to counteract market forces can use a variety of methods. One is **price fixing**, which occurs when businesses work together to set the prices of competing products. A related technique is when competing businesses agree to restrict their output, thereby driving up prices.

For example, in the mid-1990s the five major recorded music distributors began enforcing a "minimum advertised price" for compact discs sold in the United States. As a result, CD prices remained artificially high. The FTC estimated that consumers paid about $480 million more for CDs than they would have if prices had been established by market forces. In 2000 the FTC reached an agreement with the distributors to end this anticompetitive practice.

Another way businesses seek to avoid competition is by **market allocation**, which occurs when competing businesses negotiate to divide up a market. By staying out of each other's territory, the businesses develop limited monopoly power in their own territory, allowing them to charge higher prices.

For example, in the early 1990s agribusiness conglomerate Archer Daniels Midland (ADM) conspired with companies in Japan and Korea to divide the worldwide market for lysine, an additive used in livestock feeds. Around the same time, ADM also conspired with European companies to divide the worldwide market for citric acid, an additive used in soft drinks, canned foods, and other consumer products. Both of these illicit agreements also included price fixing. In 1996, the Department of Justice charged ADM with antitrust violations in both the lysine and citric acid markets. ADM pleaded guilty and paid a $100 million fine.

Occasionally, businesses use anticompetitive methods to drive other firms out of a market. One technique used by cartels or large producers is **predatory pricing**, setting prices below cost so that smaller producers cannot afford to participate in a market. Predatory pricing can be difficult to distinguish from competitive pricing. Larger businesses are usually able to offer lower prices because they have economies of scale unavailable to smaller firms.

QUICK REFERENCE

Price fixing occurs when businesses agree to set prices for competing products.

Market allocation occurs when competing businesses divide a market amongst themselves.

Predatory pricing occurs when businesses set prices below cost for a time to drive competitors out of a market.

Economics Update

Find an update about unfair business practices at **ClassZone.com**

APPLICATION Applying Economic Concepts

B. If you owned an ice cream store, could you negotiate with other ice cream store owners to set a standard price for a scoop of ice cream? Why or why not?

Protecting Consumers

KEY CONCEPTS

When the government becomes aware that a firm is engaged in behavior that is unfair to competitors or consumers, it may issue a **cease and desist order**, a ruling that requires a firm to stop an unfair business practice. The government also enforces a policy of **public disclosure**, which requires businesses to reveal product information to consumers. This protects consumers and promotes competition by giving consumers the information they need to make informed buying decisions.

QUICK REFERENCE

A **cease and desist order** requires a firm to stop an unfair business practice.

Public disclosure is a policy that requires businesses to reveal product information.

Consumer Protection Agencies

Besides enforcing laws that ensure competitive markets, the government protects consumers by regulating other aspects of business. Figure 7.6 shows some of the most important federal agencies that protect consumers. The Federal Trade Commission has primary responsibility for promoting competition and preventing unfair business practices. The Federal Communications Commission and Securities and Exchange Commission regulate specific industries. The Food and Drug Administration, Environmental Protection Agency, and Consumer Product Safety Commission protect consumers by regulating multiple industries to ensure the safety and quality of specific products and to protect consumer health.

FIGURE 7.6 Federal Consumer Protection Agencies

Agency	Created	Purpose
Food and Drug Administration (FDA)	1906	Protects consumers from unsafe foods, drugs, or cosmetics; requires truth in labeling of these products
Federal Trade Commission (FTC)	1914	Enforces antitrust laws and monitors unfair business practices, including deceptive advertising
Federal Communications Commission (FCC)	1934	Regulates the communications industry, including radio, television, cable, and telephone services
Securities and Exchange Commission (SEC)	1934	Regulates the market for stocks and bonds to protect investors
Environmental Protection Agency (EPA)	1970	Protects human health by enforcing environmental laws regarding pollution and hazardous materials
Consumer Product Safety Commission (CPSC)	1972	Sets safety standards for thousands of types of consumer products; issues recalls for unsafe products

ANALYZE TABLES

1. What's the difference between the FTC and the SEC?
2. Pick one agency, note the year it was created, and explain what might have led to its creation.

APPLICATION Making Inferences

C. Why do you think the government has decided to set up agencies to protect consumers from unsafe products?

Deregulating Industries

QUICK REFERENCE

Deregulation reduces or removes government control of business.

KEY CONCEPTS

Much government regulation in the 20th century focused on controlling industries that provided important public services. For example, in the 1930s, in response to bank closings and other problems during the Great Depression, the U.S. Congress passed many laws for oversight of the financial services industry. In the 1970s, a trend toward deregulation began. **Deregulation** involves actions taken to reduce or to remove government oversight and control of business.

Deregulation has benefits and drawbacks. Deregulation generally results in lower prices for consumers because the markets become more competitive. Firms in industries with regulated prices have little or no incentive to reduce costs. But deregulation may lead to fewer protections for consumers.

Deregulating the Airlines

The Airline Deregulation Act of 1978 removed all government control of airline routes and rates. Only safety regulations remained in place. Prior to 1978, there was limited competition, and airlines differentiated based on service rather than price.

As a result of deregulation, the industry expanded as many new carriers entered the market. Increased competition led to greater efficiency. Economists estimate that prices fell by 10 to 18 percent, falling most sharply on heavily traveled routes where there was the greatest amount of competition. More people than ever before, lured by lower prices, chose to travel by plane.

However, the quality of service declined as airlines cut back on food and other in-flight amenities to reduce costs. In addition, many travelers encountered crowded airports as a result of the increase in air travel. It took time for local governments to expand facilities to accommodate the increase in traffic.

The financial pressures led to a large number of bankruptcies among the airline companies. Airline employees faced increased layoffs, lower wages, and loss of pensions.

APPLICATION Analyzing Causes

C. Why did deregulation of the airline industry lead to lower prices for many consumers?

SECTION 4 Assessment

Online Quiz
ClassZone.com

REVIEWING KEY CONCEPTS

1. Explain the differences between the terms in each of these pairs:

a. *trust* / *merger* **b.** *price fixing* / *predatory pricing* **c.** *regulation* / *deregulation*

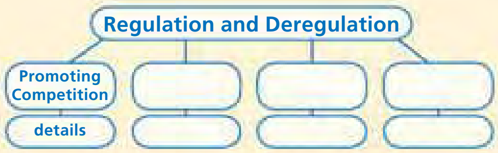
2. What is the main purpose of antitrust legislation?

3. How does market allocation lead to reduced competition?

4. When would the government issue a cease and desist order?

5. How do public disclosure requirements protect consumers?

6. Using Your Notes Why is it important for the government to evaluate and approve mergers? Refer to your completed hierarchy diagram.



Use the Graphic Organizer at **Interactive Review @ ClassZone.com**

CRITICAL THINKING

7. Analyzing Causes and Effects In 2005, the FTC approved the merger of The Gillette Company with Procter & Gamble. Experts who reviewed the merger said it made sense that it was approved because the two companies had few products in the same market categories. In order to satisfy the government, the companies had to sell only two of their brands to other companies. What factors that affect mergers are illustrated in this story?

8. Applying Economic Concepts In the early 2000s, a new form of marketing emerged called word-of-mouth marketing or buzz marketing. Companies hired ordinary people to talk about the benefits of their products to others. Marketing industry lawyers warned their clients that it was important that the hired spokespeople reveal that they were paid for their endorsements. What are the lawyers concerned about? Use the concepts from this section to formulate your answer.

9. Challenge The Telecommunications Act of 1996 included provisions to deregulate the cable television industry. In 2003, consumer organizations complained that cable rates had increased by 45 percent since the law was passed. Only 5 percent of American homes had a choice of more than one cable provider in 2003. Those homes paid about 17 percent less than those with no choice of cable provider. How effective had deregulation been in the cable industry by 2003? Cite evidence to support your answer.

ECONOMICS IN PRACTICE

Identifying Regulatory Agencies

Several federal agencies provide protection for consumers. Many of them are listed in Figure 7.6 on page 217. Decide which agency or agencies from Figure 7.6 would best protect consumers in each of the situations below.

a. Children's necklaces sold over the Internet are found to contain high levels of lead. Consumers are concerned about the chance of lead poisoning.

b. Advertising for a skin cream claims that it will eliminate acne problems. Consumers find that the product does not live up to its claim and in fact seems to irritate people's faces and cause rashes.

c. Some apple farmers use a pesticide on their trees that causes illness. More and more of the pesticide has been found in groundwater supplies.

Challenge Find out about a government regulatory agency not listed in Figure 7.6. Discuss the agency's purpose with your class.

Case Study

Economics Update
Find an update on this Case Study at **ClassZone.com**

Competition in Gadgets and Gizmos

Background Cellular phones are a highly successful telecommunications product. Since they first appeared on the market in the 1980s, cell phone sales have grown steadily. Now, billions of people around the world own cell phones.

As the global market becomes saturated with cell phones, sales growth will slow. To counteract this, cell phone producers rely on product differentiation to increase sales. New gadgets and gizmos aim to make the cell phone both irresistible and indispensable. A director of business development at one cell phone maker summed up his strategy this way: “We are trying to drive the cell phone in[to] every aspect of your life.”

What’s the issue? What affects your selection of a cell phone? Study these sources to discover how producers use product differentiation to compete for your business.

A. Magazine Article

Nokia Corporation, a maker of phone handsets, developed several add-ons to boost sales. This article describes one of Nokia’s plans.

Nokia Hopes to Attract Consumers with Mobile-TV

Web-browsing, picture-messaging, videos, and now TV

Nokia, the world’s largest handset-maker, has just released the results of a mobile-TV trial in Helsinki which found that 41% of participants were willing to pay for the service, and thought a monthly fee of €10 [€ is the European Union currency, the euro] ($12.50) was reasonable.

As revenue from voice calls has stopped growing in developed markets, the industry has been searching for new avenues for growth. In recent years, it has championed mobile web-browsing, picture-messaging and video-telephony. . . . But . . . consumers have not taken to these things in large numbers. . . .

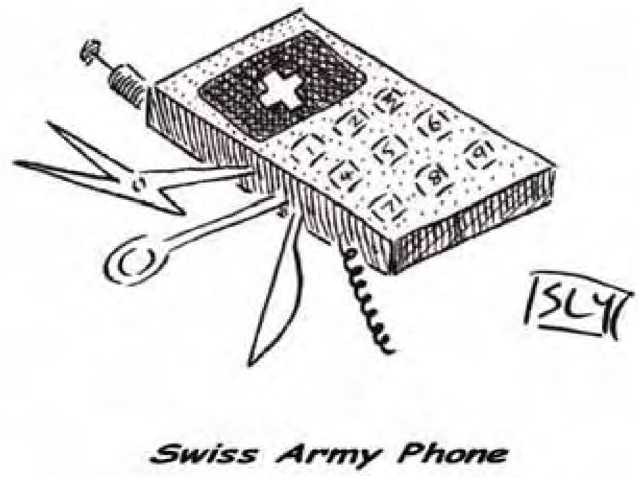
Ah, but mobile TV is different from all those other services . . . because there is no need to educate the consumer. “Everyone gets it if you say ‘mobile TV’,” says Richard Sharp of Nokia.

Source: **“Anyone for Telly?”** ***The Economist*****, September 10, 2005**

Thinking Economically What caused Nokia to develop mobile-TV? Explain, using evidence from the article.

B. Cartoon

This cartoon makes light of the dozens of features packed into most cellular phones.



Source: www.CartoonStock.com

Thinking Economically Why do cellular phone makers include so many features in their phones?

C. Online Press Release

Gartner, Inc. provides research and analysis on the information technology industry. This press release presents its projections on mobile phone sales.

Text not available for electronic use.
Please refer to the text in the textbook.

Thinking Economically Are manufacturers more likely to offer differentiated products in new markets or in those already established? Explain your answer.

THINKING ECONOMICALLY Synthesizing

1. Compare the product described in document A and the one illustrated in B. Are cell phones likely to become more or less complex? Explain why or why not.
2. Which of the four market structures best fits the market for cellular phones? Use evidence from documents A and C to explain your answer.
3. In documents A and C, compare the role that market research plays in the development of new products. Use evidence from the documents.

Interactive Review

Review this chapter using interactive activities at **ClassZone.com**

- Online Summary
- Quizzes
- Vocabulary Flip Cards
- Graphic Organizers
- Review and Study Notes

Online Summary

Complete the following activity either on your own paper or online at **ClassZone.com**

Choose the key concept that best completes the sentence. Not all key concepts will be used.

antitrust legislation	monopoly
barrier to entry	natural monopoly
cartel	nonprice competition
cease and desist order	oligopoly
deregulation	patent
economies of scale	perfect competition
geographic monopoly	price fixing
market structure	price taker
merger	standardized product
monopolistic competition	start-up costs

__1__ is an economic model of the nature and degree of competition among businesses in the same industry. In __2__ there are many buyers and sellers of standardized products.

In a __3__ there is a single seller of a product with no close substitutes. The local water company is an example of a __4__ because __5__ make it most efficient for a single company to provide the service.

A __6__ is a group of sellers that acts together to set prices and limit output. A __7__ is anything that makes it difficult for a business to enter a market.

In __8__ there are many buyers and sellers of similar but differentiated products. In such a market the sellers engage in __9__.

In __10__ there are only a few sellers for many buyers. It is hard for new firms to enter such a market due to high __11__. Sellers in such a market engage in __12__ when they all agree to charge the same price for their products.

__13__ gives the government the power to control monopolies and to promote competition.

CHAPTER 7 Assessment

REVIEWING KEY CONCEPTS

What Is Perfect Competition? (pp. 192–197)

1. What determines the difference between one market structure and another?
2. Why is perfect competition not found in real markets?

The Impact of Monopoly (pp. 198–205)

3. How does a monopoly control the price of its product?
4. Name three ways in which a monopoly differs from perfect competition.

Other Market Structures (pp. 206–213)

5. Why is product differentiation necessary for monopolistic competition?
6. Why are firms in an oligopoly less independent in setting prices than firms in monopolistic competition?

Regulation and Deregulation Today (pp. 214–221)

7. What factors does the government consider in deciding whether to approve a merger?
8. Why do economists generally favor deregulation of most industries?

APPLYING ECONOMIC CONCEPTS

Look at the table below showing retail sales.

9. Which retail market is the least concentrated? Which market is most concentrated?
10. Which markets are closer to monopolistic competition and which are closer to oligopoly?

FIGURE 7.7 SALES CONCENTRATION IN RETAIL TRADE

Retail Market	Percent of Total Sales by the Four Largest Firms
Furniture	8
Clothing	29
Supermarkets	33
Music	58
Athletic footwear	71
Books	77
Discount department stores	95

Source: U.S. Census Bureau, 2002 data

CRITICAL THINKING

11. Applying Economic Concepts In 2004, a new trend started in the marketing of music CDs. A variety of retailers, from coffee shop and restaurant chains to large discount stores, began negotiating marketing deals that allowed them to sell a particular recording artist's CDs exclusively for a period of time.

a. What part of monopolistic competition does this trend reinforce: the monopolistic aspect or the competition aspect?

b. How is this trend likely to affect prices for these CDs? Give reasons why.

12. Analyzing Causes and Effects After deregulation of the airline industry, many of the largest U.S. airlines struggled financially. These airlines then increased their business in the international market in order to boost their profits. What effect of deregulation caused the airlines to make this move?

13. Making Inferences The company that invented the first xerographic photocopier initially enjoyed 70 percent profit margins and a 95 percent market share. Several years later a Japanese camera company invented another way to make photocopiers. Over time, the original company's market share fell to 13 percent. What specific kind of market structure is illustrated by this example? When a company invents a new product or process, what concerns might they have, if they studied this example?

14. Drawing Conclusions An herbal supplement company claimed that its product would cure serious diseases and promote weight loss. In 2005, the Federal Trade Commission (FTC) required the company to stop making those claims. Why did the FTC rather than the Food and Drug Administration (FDA) handle this case?

15. Challenge Why might a local electric company be in favor of regulations that would allow it to remain a natural monopoly? Why might it oppose regulations that would require monitoring the pollution from its generating plants?

SIMULATION

Compete for Buyers

Step 1. Choose a partner. Imagine that together you run a company that produces flat-screen televisions under monopolistic competition. Use the criteria in this table to decide how to differentiate your product.

Product and Marketing Considerations
• Physical characteristics
• Where it will be sold
• Packaging or labeling
• Service
• Advertising and promotion
• Price (from $500 to $1,500)

Step 2. Create a poster that outlines your product and marketing decisions. Include a sketch of one of your televisions along with the price.

Step 3. Display all the posters in the classroom. Allow all students to buy a television from the company of their choice. Tally the results and see how many buyers each company attracted.

Step 4. Merge with two or three other companies to form a larger company. There should now be only three or four producers. Discuss how this new situation might affect your marketing decisions.

Step 5. As a class, discuss what would happen if the three or four firms became a cartel and acted like a monopoly.

Challenge Which of these scenarios would you prefer as a producer? Which would you prefer as a consumer?