Chapter 21

Demand and Supply

Why It Matters

Two forces work together in markets to establish prices for all the goods and services we buy. They are demand—the desire, willingness, and ability to buy a good or service, and supply—the quantities of a good or service that producers are willing to sell at all possible market prices.

Denis Poroy/AP Images

BIG Ideas

San Diego drivers find lower gas prices at the co-op gas station

Section 1: Demand

Supply and demand in a market interact to determine price and the quantities bought and sold. Demand is the desire, willingness, and ability to buy a good or service.

Section 2: Factors Affecting Demand

Supply and demand in a market interact to determine price and the quantities bought and sold. Several factors can cause market demand for a product or service to change.

Section 3: Supply and the Supply Curve

Supply and demand in a market interact to determine price and the quantities bought and sold. Supply is the willingness and ability to produce and sell a good or service.

Section 4: Demand and Supply at Work

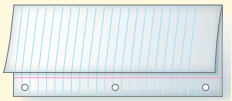
Supply and demand in a market interact to determine price and the quantities bought and sold. In our economy, the forces of supply and demand work together to establish prices.

FOLDABLES™ Study Organizer

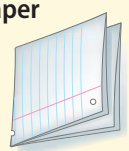
Organizing Information Study Foldable

Make the following Foldable to help you compare the aspects of supply and demand and where they overlap.

Step 1 Fold a sheet of paper in half from the long way with one inch edge left.



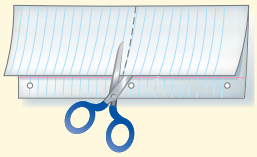
Step 2 Turn the paper and fold it into halves.



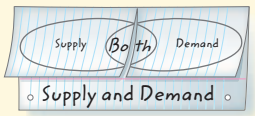
Reading and Writing
As you read the chapter, compare and contrast supply and demand.

Cut along two folds on the front flap to make 2 tabs.

Step 3 Unfold and cut the top layer only along both folds.



Step 4 Label as shown, including drawing ovals for a Venn diagram.



Section 1

Demand

Guide to Reading

Big Idea

Supply and demand in a market interact to determine price and quantities bought and sold.

Content Vocabulary

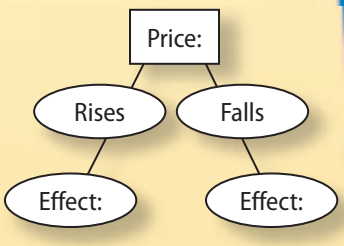
- demand *(p. 569)*
- demand schedule *(p. 569)*
- demand curve *(p. 569)*
- law of demand *(p. 569)*
- market demand *(p. 570)*
- utility *(p. 570)*
- marginal utility *(p. 572)*

Academic Vocabulary

- identify *(p. 570)*
- illustrate *(p. 572)*
- likewise *(p. 572)*

Reading Strategy

Analyzing As you read the section, complete the diagram below to illustrate how change in prices affects the quantity demanded.



Interactive Graphic Organizer

NORTH CAROLINA STANDARDS
Civics and Economics

8.04 Illustrate how supply and demand affects prices.

Real World Economics

With heating and oil prices at all-time highs in 2006, people began to look for alternative sources of heat. All across New England—especially—people are turning to wood as fuel, and the price for it has risen. Reed's Firewood in Durham, Maine, supplies its customers who want to supplement their heating sources and to use wood as backup if their power goes out. As wood use increases over time, its price will rise more, and consequently, its demand will diminish.

▼ **Paul Reed, Sr., loads firewood for customers in Maine**

Pat Wellenbach/AP Images

An Introduction to Demand

Main Idea **Demand is the desire, willingness, and ability to buy a good or service.**

Economics & You Do your ears perk up when something you want goes on sale? Read to find out which economic principle is at work.

What is **demand?** In economics, it refers to the desire, willingness, and ability to buy a good or service. For demand to exist, a consumer must *want* a good or service. The consumer has to be *willing* to buy the good or service. Finally, the consumer needs the *resources* to buy it.

The Individual Demand Schedule

When you buy something, do you wonder why it sells at a particular price? A **demand schedule** is a table that lists the various quantities of a product or service that someone is willing to buy over a range of prices. Look at the demand schedule on page 571. It shows how many video games a person—we will call him Ryan—would be willing to buy at different prices. For example, Ryan would not purchase any video games if they cost $50 each. If the price were $20 per game, though, he would be willing to buy two.

The Individual Demand Curve

Demand can also be shown graphically. A **demand curve** is a graph that shows the amount of a product that would be bought at all possible prices in the market. The curve is drawn with prices on the vertical axis and quantities on the horizontal axis. Each point on the curve shows how many units of the product or service an individual will buy at a particular price.

Look at the demand curve on page 571. Notice that each point on the graph matches the quantity listed in the demand schedule. Ryan would buy five video games if the price were $5 each, three games at $10 each, and so on.

Desire to Buy New technology for video games available at computer stores is always in high demand. ***Explaining*** **How does the price of an item affect the demand?**

The Law of Demand

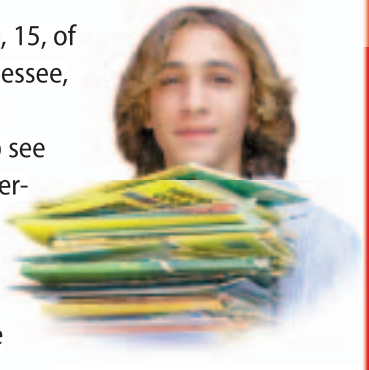
Look at the graph again. As you see, demand curves usually slope downward because people are normally willing to buy less of a product if the price is high and more of it if the price is low. According to the **law of demand,** quantity demanded and price move in opposite directions. This is the way people behave in everyday life. People ordinarily do buy more of a product at a low price than at a high price. All we have to do is to observe the increased traffic and purchases at the mall whenever there is a sale. This is just common sense. Are you not more interested in buying more of something when the price is lower than when the price is higher?

Reading Check **Comparing** Describe the relationship between the demand schedule and the demand curve.

Paul Sakuma/AP Images

TIME Teens in Action

Daniel Lawrence



Daniel Lawrence, 15, of Knoxville, Tennessee, did not have to read between the lines to see that his city had a literacy problem. He decided to help out!

QUESTION: Why did you start "Let Me Read to You"?

ANSWER: Inner-city schools in Knoxville ask parents to read to younger children every night. Many of these students live in homes where this request is not met—either because parents can't read, or they don't have the time or energy to read to their children. "Let Me Read to You" was founded in 2005 to help.

Q: How does it work?

A: Commercial audiobooks already exist—but these families can't afford them. So our organization records early reader books onto CDs and donates the books and CDs to inner-city schools. The students are typically in first through third grades. They can read and hear the books at school or take them home for the night.

Q: How will the CDs help these kids?

A: They help them develop good reading skills—a very important thing in today's world. These students will have a better chance to succeed in life.

Q: What's next?

A: Once in high school I am going to start a program to fight Knoxville's litter problem.

Making a Difference CITIZENSHIP

Daniel's group helped children look at the books and listen to them. Why do you think both looking and listening are important?

Market Demand

Main Idea **Market demand is the total demand of all consumers for a product or service.**

Economics & You Does your ninth slice of pizza taste just as good as the first? Read to find out what economic principle this example illustrates.

So far we have been looking at only one person's demand for a product or service. Companies hope to sell to many people, though. They are interested in the **market demand**—the total demand of all consumers for their product or service. Market demand can also be shown as a demand schedule or as a demand curve (see page 571).

An Example of Demand

Imagine you are opening a bicycle repair shop. Before you begin, you need to know where the demand is. You want to set up your shop in a neighborhood with many bicycle riders and few repair shops. After you **identify,** or establish, an area in which to locate the shop, how do you measure the demand for your services? You may visit other shops and gauge the reactions of consumers to different prices. You may poll consumers about prices. You could study data compiled over past years, which would show consumer reactions to prices. All of these methods would give you a general idea as to the desire, willingness, and ability of people to pay.

Marginal Utility

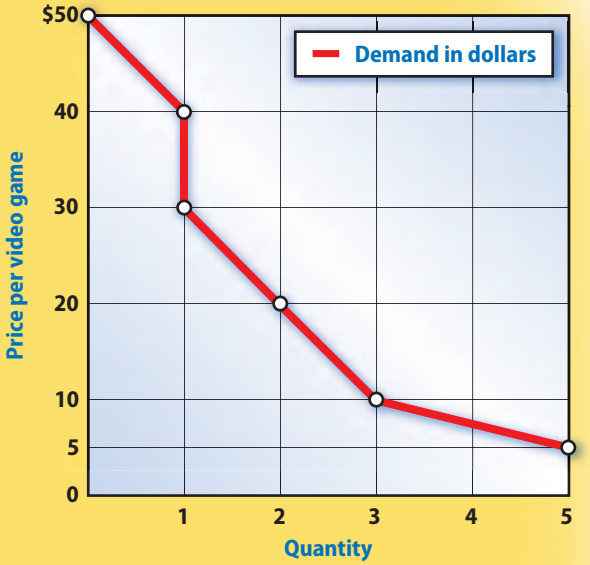
Almost everything that we buy provides **utility,** meaning the pleasure, usefulness, or satisfaction we get from using the product. The utility of a good or service may vary from one person to the next. For example, you may get a great deal of enjoyment from a home computer, but your friend may get very little. A good or service does not have to have utility for everyone, only for some.

(t b)Gary Heatherly

The Law of Demand

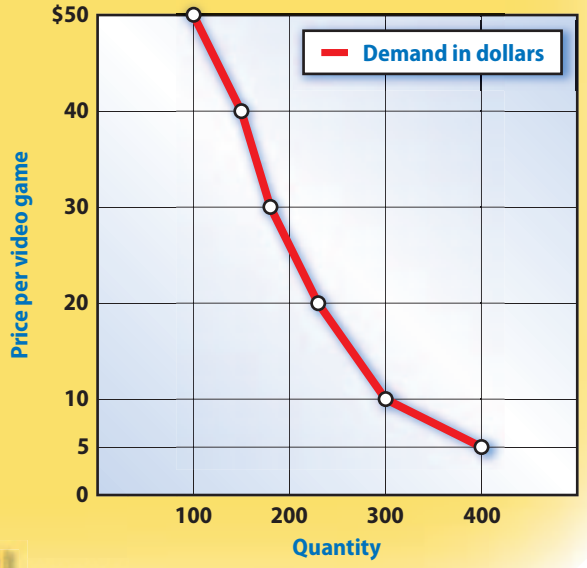
Individual Demand Schedule	
Price per video game	Quantity
$50	0
$40	1
$30	1
$20	2
$10	3
$ 5	5

Individual Demand Curve



Market Demand Schedule	
Price per video game	Total Quantity Demanded
$50	100
$40	150
$30	180
$20	230
$10	300
$ 5	400

Market Demand Curve



Analyzing Charts and Graphs

1. **Calculating** How many video games is the market willing to purchase at a price of $30? What happens to market demand if the price falls to $20 per video game?
2. **Explaining** The demand curve is the graphic representation of the law of demand. Why does the demand curve slope downward?

Diminishing Marginal Utility

Our satisfaction usually changes as we consume more of a particular product. For example, when eating pizza, you may be very hungry before you eat the first slice, and so it will give you the most satisfaction. Because you are not quite as hungry after eating the first slice, you receive less **marginal utility,** or additional satisfaction, from each additional slice that you eat. This **illustrates,** or shows, diminishing marginal utility—the principle that our additional satisfaction, or our marginal utility, tends to go down as more units are consumed.

This concept is not something you consciously call marginal utility in your mind when you do it, but it is part of your thought processes. If the extra benefits (the marginal utility) to be gained are greater than the marginal cost (the money given up or paid) then we make the purchase. Otherwise we keep our money.

Because our marginal utility diminishes when we consume more of a product, it stands to reason that we would not be as willing to pay as much for the second item as we did for the first. **Likewise,** we would not be willing to pay as much for the third item as we did for the second. When the demand curve slopes downward, it simply tells us that we would be willing to pay the highest price for the first unit we consume, a slightly lower price for the next, an even lower price for the third, and so on.

Reading Check **Comparing** What is the difference between individual demand and market demand?

Section 1 Review

Vocabulary

1. **Write** a sentence for each of these terms that helps explain its meaning: *demand, demand schedule, demand curve, law of demand, market demand, utility, marginal utility.*

Main Ideas

2. **Explaining** What is the law of demand?
3. **Comparing** What is the difference between a demand schedule and a demand curve?

Critical Thinking

4. **Analyzing** Explain how the principle of diminishing marginal utility is related to the law of demand.
5. **BIG Ideas** On a diagram like the one below, identify a relatively rare good or service today that you think will be in very high demand in 20 years. Provide at least two reasons for your prediction.

Good or Service	
Reason 1	
Reason 2	

6. **Analyzing Visuals** Study the schedule and graph illustrating the law of demand on page 571. What is the quantity demanded at $40? What happens to the total quantity demanded as the price increases?

Interactive Graphic Organizer

Citizenship Activity

7. **Interview** a local merchant to determine the demand for a particular product or service at a specific period of time. Present your findings in graph form. Write a paragraph explaining what factors most affected demand for the product or service.
8. **Expository Writing** Suppose the boss of a company you work for has asked you how to estimate the demand for a new product the company is introducing. Write a memo outlining how you would approach this assignment.

Civics Online

Study Central™ To review this section, go to glencoe.com.

Section 2

Factors Affecting Demand

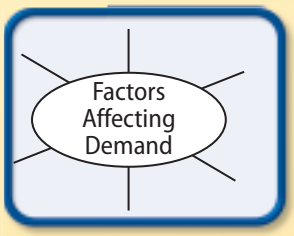
Guide to Reading

Main Idea
Supply and demand in a market interact to determine price and the quantities bought and sold.

Content Vocabulary
- substitute *(p. 575)*
- complement *(p. 576)*
- demand elasticity *(p. 577)*

Academic Vocabulary
- immigration *(p. 574)*
- phenomenon *(p. 577)*

Reading Strategy
Organizing As you read the section, complete a diagram like the one below by identifying six factors that affect demand.



Interactive Graphic Organizer

NORTH CAROLINA STANDARDS
Civics and Economics

8.04 Illustrate how supply and demand affects prices.
9.03 Explain the impact of the movement of human and capital resources on the United States economy.

Real World Economics "Back-to-school" for college students means big business for some retailers. While sales in some areas of the home furnishings business in America may be weak, companies that cater to back-to-school shoppers do not suffer from the effects of high energy prices or slower housing sales. Each fall, when thousands of students return to school, stores that sell items such as desk supplies, computers, and dorm-room furnishings can count on a high demand.

▼ **College student in Texas tests possible dorm chair's comfort**

Ron Heflin/AP Images

Changes in Demand

Main Idea **Several different factors can cause market demand for a good or service to change.**

Economics & You Can you remember a toy that you absolutely had to have when you were younger? Read to find out how a product's popularity affects demand.

The demand for any product or service is not the same over time. Sometimes people are willing to buy higher quantities of a good or a service at a particular price. At other times they are less willing to do so. As a result, demand can increase or decrease.

Why Does Demand Change?

Several factors cause market demand to change. Market demand can change when more consumers enter the market. Market demand can also change when the incomes, tastes, and expectations of the consumers in the market change. Finally, changes in the prices of related goods affect demand.

Demand and Choice The huge variety of magazines produced is made possible by consumer tastes. ***Predicting*** **What would happen to demand if there were only one magazine about a particular topic?**

These changes can all be graphed using a market demand curve. When demand goes down, people are willing to buy fewer items at all possible prices (see the graph showing a decrease in demand on page 575). In this case, the demand curve shifts to the left. When demand goes up, people are willing to buy more of the same item at any given price. This pushes the entire demand curve to the right. Look at the graph on page 575 that shows an increase in demand.

What Determines Demand?

Demand curves do not shift to the right or left without cause. They shift because of changes in income, preferences, price of related goods, and changes in population. You as a consumer need to be aware of these factors.

Changes in Population Demand for a good in a particular market area is related to the number of consumers in the area. More people means the higher the demand; the smaller the population, the lower the demand.

For example, suppose a company puts up a new apartment building and the building is soon filled with families. These new residents begin to buy products and services from area businesses. As a result, demand for gasoline, food, and video rentals in this area will go up. In this case, the demand curve will shift to the right.

The same factor can cause a change in the opposite direction. When many people move out of an area, demand in that area for goods and services goes down. Here the demand curve shifts to the left.

Why Population Changes The number of consumers in a particular market area may change for a number of reasons. A higher birthrate or increased **immigration**—the arrival of people from another region—increases the number of consumers. Factors such as a higher death rate or the migration of people out of a region can also cause the number of consumers to fall.

Tom Carter / PhotoEdit

Changes in Income Demand also changes when consumers' incomes change. When the economy is healthy, people receive raises or move to better-paying jobs. With more money to spend, they are willing to buy more of a product at any particular price.

The opposite can happen, too. In hard times, people lose their jobs. They have less money to spend, so demand goes down.

Changes in Tastes Changing tastes and fading popularity of a product can affect demand as well. When a product becomes popular, the demand curve shifts to the right. More people are willing to buy the product at a particular price. We often see this during the holiday shopping season when a new product becomes the "must-buy" of the year.

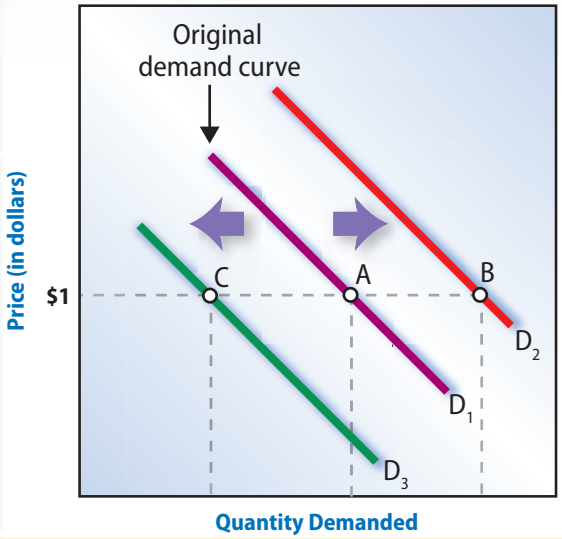
Many products, though, fade in popularity over time. When that happens, fewer are sold at a particular price, and the demand curve shifts to the left.

Changes in Expectations Expectations refer to the way people think about the future. For example, suppose that a leading maker of audio products announces a technological breakthrough that would allow more music to be recorded on a smaller disk at a lower cost than before. Even if the new product might not be available for another year, some consumers might decide to buy fewer music CDs today because they want to wait for the new product.

Expectations can also affect demand in another way. In late 2001, following the September 11 terrorist attacks, people were worried about the economy. As a result, they were less willing to spend money on holiday gifts. The demand for goods was reduced.

Expectations can also force demand higher. If people expect a shortage of a good, such as gasoline, they tend to stock up and demand increases. This shifts the demand curve to the right.

A Change in Demand



Analyzing Graphs

1. **Explaining** What does it mean when the demand curve shifts to the right (D_1 to D_2)?
2. **Explaining** What does it mean when the demand curve shifts to the left (D_1 to D_3)?

Product-Related Changes

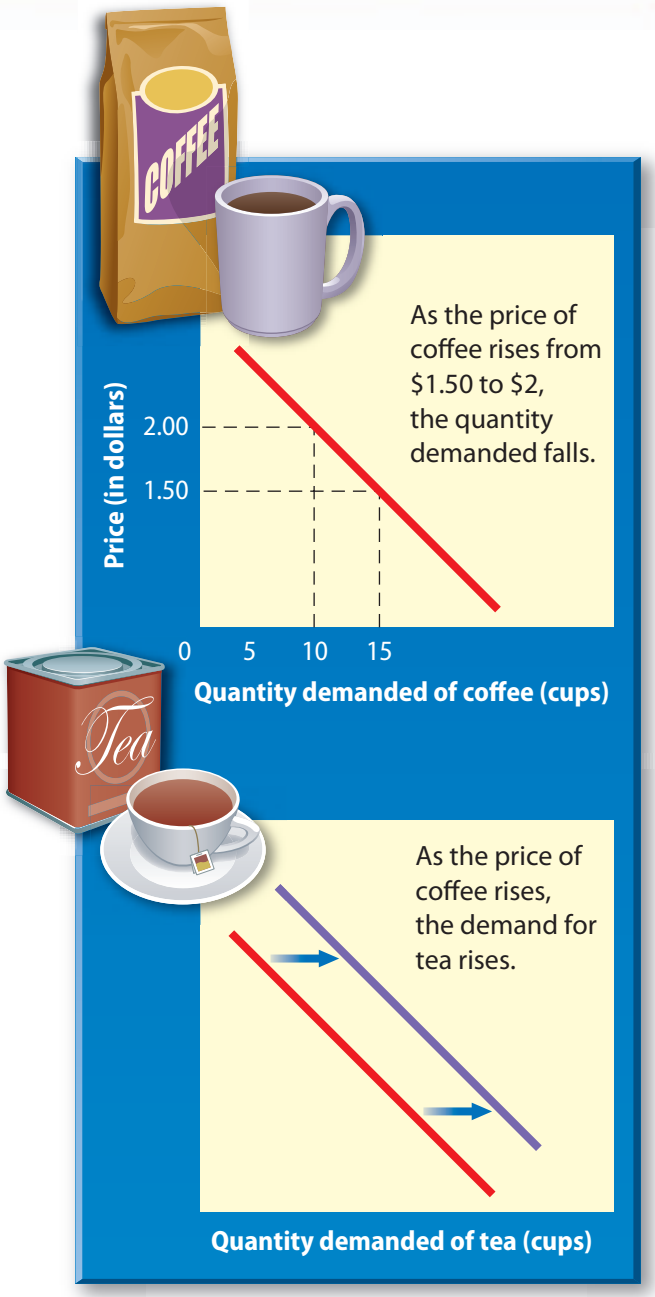
You have learned that demand curves do not shift to the right or left without cause. Factors that also affect demand are related to the products themselves.

Demand can be influenced by changes in the price or quality of related products. The demand for older computers falls when new models with faster processors come out. The demand for a certain brand of tire may increase when another tire has safety problems.

Price of Related Goods

The demand for a good is affected by the prices of related goods. There are two types of related goods; substitutes and complements. Competing products are called **substitutes** because consumers can use one in place of the other.

Change in Demand for Substitutes



Analyzing Graphs

1. **Explaining** What happens to the demand for coffee if the price of coffee increases?
2. **Analyzing** How would an increase in the price of coffee affect demand for tea?

Changes in Substitutes When two goods are substitutes, a change in the price of one good causes the demand for the other good to move in the *same* direction. For example, for many people, butter is a substitute for margarine. If the price of margarine increases, the demand for butter also increases (shifts to the right).

Changes in Complements Some products are **complements**—they are used together. For example, computers and software are complements. With complementary goods, the demand for one moves in the opposite direction as the price of the other. So if computer prices rise, fewer computers will be demanded, and the demand for computer software will go down.

You can also see the same effect when the price goes down instead of up. When the price of DVD players goes down, more DVD players are demanded, which also results in an increase in the demand for DVDs. Other examples of complements (or complementary goods) include cars and gasoline, and lightbulbs and lamps.

A Change in Quantity Demanded

You learned that a change in demand refers to a shift in the *entire* demand curve. You learned that factors that can shift the demand curve include the number of buyers, income, taste, preferences, and price of related goods.

A change in quantity demanded refers to a movement from one point to another along a given demand curve. The only factor that can directly cause a change in the quantity of a good is a change in the price—its own price. For example, as shown here, the price of coffee increased from $1.50 to $2 per cup. The change in the price of coffee brings about a change in the quantity demanded.

Reading Check **Comparing** Are butter and margarine substitute goods? Why or why not?

Demand Elasticity Auto sales can be affected by changes in price. ***Explaining*** **If these young men purchase a car at a recently reduced price, how does the purchase illustrate the elasticity of demand?**

Elasticity of Demand

Main Idea **Demand elasticity is the extent to which a change in price causes a change in the quantity demanded.**

Economics & You Does your family always have turkey at Thanksgiving? Read to find out what might happen if stores raised the price of turkey at Thanksgiving.

The law of demand states that price and quantity demanded move in opposite directions. If price goes up, quantity demanded goes down; and if price goes down, quantity demanded goes up.

Now suppose price goes up from $1 to $1.25, a 25 percent increase. We know that quantity demanded will go down, but we do not know by how much. Quantity demanded could go down by 25 percent, by less than 25 percent, or by more than 25 percent.

All products and services are not affected by these factors in the same way. Economists call this **phenomenon,** or rare occurrence, **demand elasticity.** Demand elasticity is the extent to which a change in price causes a change in the quantity demanded.

Elastic Demand

For some goods and services, demand is elastic. This means that each change in price causes a relatively larger percentage of change in quantity demanded. For example, when automakers reduce car prices modestly, the quantity sold goes up greatly. When they raise the price of their cars, the quantity sold goes down a great deal.

When there are attractive substitutes for a good or service, demand tends to be elastic. That is because consumers can choose to buy the substitute. Expensive items generally have elastic demand. That is because consumers are less willing to pay even more for goods that are expensive in the first place.

Spencer Grant / PhotoEdit

Finally, demand is usually elastic when a purchase can be postponed until later. In this case, consumers delay buying the good or service in the hopes that the price will go down. Again, this usually happens when consumers are dealing with higher priced items.

Inelastic Demand

You know that demand for a good or service is elastic if it is very responsive to a change in price. For other goods and services, demand is inelastic. This means that price changes have little effect on the quantity demanded. For example, the demand for turkey at Thanksgiving tends to be inelastic. Many people make turkey a central part of their Thanksgiving meal. If supermarkets slightly raise the price of turkey, they would probably not lose many customers. At another time of year, higher turkey prices might cause consumers to purchase other meat products instead.

The demand for goods with very few or no substitutes, such as pepper, electricity, and some medicines, is likely to be inelastic. Heart medicine, for example, has relatively few substitutes; many people must have it to stay well. Even if the price of heart medicine doubled, quantity demanded probably would not fall by much.

Necessities and Luxuries Demand for heart medicine and food is inelastic because these are necessities. Necessities are goods that people need in order to survive. If the price of a necessity increases, people cannot cut back very much on the quantity demanded. However, demand for luxuries is likely to be elastic. If the price of a luxury good increases, buyers are more able to cut back on the quantity demanded.

Reading Check **Inferring** Why is the demand for insulin, a medicine for people with diabetes, inelastic?

Section 2 Review

Vocabulary

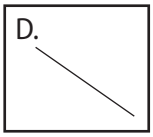
1. **Write** a paragraph in which you use each of these terms correctly: *substitute, complement, demand elasticity*.

Main Ideas

2. **Explaining** If income and population increase, what tends to happen to demand?
3. **Comparing** What is the distinction between elastic and inelastic demand?

Critical Thinking

4. **Concluding** Will products that are very important to us and that have no close substitutes have elastic or inelastic demand? Why? What is an example of such a product?
5. **BIG Ideas** Re-create the diagram below. Use arrows to indicate the direction of movement on the demand curve for tennis balls if the price of tennis rackets increases.



Interactive Graphic Organizer

Citizenship Activity

6. **Research** Find an example of the law of demand or elasticity of demand in a newspaper or magazine article or advertisement. Share your findings with the class.
7. **Creative Writing** Working with a partner, write a dialogue between a store owner and a customer about some aspect of demand, as discussed in this section. Perform your dialogue with a partner for the class.

Civics ONLINE

Study Central™ To review this section, go to glencoe.com.

Financial Literacy

Writing a Résumé: Dos and Don'ts

A résumé is a brief summary of your abilities, education, experience, and skills. To get an employer's attention, prepare a one- to two-page résumé that highlights your talents and skills. Prevent it from landing in the recycle bin by keeping these ideas in mind.

Résumé Dos

- Include your contact information.
- Make the layout easy to read.
- Highlight your special skills.
- Print your résumé on high-quality paper.
- Review your résumé for any grammar errors or other mistakes.
- Use action words to describe your experience and accomplishments.
- Always include a cover letter with your résumé. Get right to the point in your letter. State your employment goal and highlight reasons that you are qualified for the job.

Résumé Don'ts

- Do not include any personal information such as your race, religion, family, or marital status.
- Do not use inaccurate dates or pad your résumé with things you have not actually done.
- Do not write long paragraphs; use bulleted lists instead.

Your Résumé

Ima Ginary
800 Fernhill Way
Middletown, KS 12347
(555) 555-5610
fake@randomemailserver.com

Contact Information

Objective

OBJECTIVE:
Seeking a summer internship at Middletown Bank

Education

EDUCATION:
West Prairie Land High School, Middletown, KS
Diploma expected June 2008
GPA: 3.7/4.0

Experience

EXPERIENCE:
Jerry's Pizza Shop, Middletown, KS
Crew Leader (March 2005–present)
• Managed employees and time sheets

COMMUNITY SERVICE:
Riverside General Hospital, Middletown, KS (Summer 2007)
• Contributed 8 hours per week in pediatrics

HONORS:
National Honor Society, member, 2007–present
• Honor Society Treasurer (2008)

Honors & Activities

Analyzing Economics

Writing a résumé Be sure to include these parts: name and contact information, objective statement (your career goals), education, professional experience, and skills.

Section 3

Supply and the Supply Curve

Guide to Reading

Big Idea

Supply and demand in a market interact to determine price and the quantities bought and sold.

Content Vocabulary

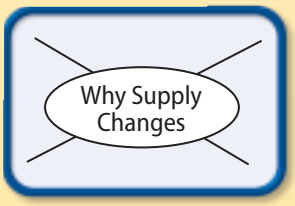
- supply *(p. 581)*
- law of supply *(p. 581)*
- supply schedule *(p. 581)*
- supply curve *(p. 583)*
- profit *(p. 583)*
- market supply *(p. 584)*
- productivity *(p. 585)*
- technology *(p. 585)*
- subsidy *(p. 585)*
- supply elasticity *(p. 586)*

Academic Vocabulary

- motive *(p. 583)*
- restrict *(p. 585)*

Reading Strategy

Organizing As you read the section, complete a diagram like the one below to identify the factors that affect supply.



Interactive Graphic Organizer

NORTH CAROLINA STANDARDS
Civics and Economics

8.04 Illustrate how supply and demand affects prices.

Real World Economics Organic farming is changing the face of American agriculture. Why? Because of the growing demand for its products from customers. In addition to concerns about pesticides that nonorganic growers use, consumers now want to "buy local" to avoid using extra fuel to transport food from thousands of miles away. Organic farmers Dennis and Sandy Dierks find customers are willing to pay extra for their organic produce. So organic farmers are reporting rising profits, which help recoup their increased production costs.

Dennis and Sandy Dierks harvest vegetables on their organic farm

George Nikitin/AP Images

Supply and Choice Consumers must choose from a huge number of snack foods, each with a different price and nutritional value. ***Comparing*** **What do you think affects the supply of snack foods the most—the price or ingredients? Why?**

An Introduction to Supply

Main Idea **Supply is the quantities of a good or service that producers are willing to sell at all possible market prices.**

Economics & You If you were paid overtime, would you want to work extra hours? Read to find out what economic theory is at work.

What is supply? **Supply** refers to the various quantities of a good or service that producers are willing to sell at all possible market prices. Supply normally refers to the output of a single business or producer. However, it is also possible to add together the supply of all producers to get the supply for the entire market.

Supply is the opposite of demand. Buyers demand different quantities of a good depending on the price sellers ask. Suppliers offer different quantities of a product depending on the price buyers are willing to pay.

The Law of Supply

Remember that as the price rises for a good, the quantity demanded goes down. As the price of a good goes down, the quantity demanded rises. The quantity supplied also varies according to price—but in the opposite direction. As the price rises for a good, the quantity supplied rises. As the price falls, the quantity supplied also falls. This is the **law of supply,** the principle that suppliers will normally offer more for sale at higher prices and less at lower prices. The higher the price of a good, the greater the incentive is for a producer to produce more.

We can represent the law of supply with numbers, just as we did with the law of demand. The table at the top left of page 582 shows this. As the price goes up from $5 to $10 to $20 and to $50, the quantity supplied goes up from 1 to 10 to 30 and to 100. Producers create more items in the hopes of selling more at the higher price. A numerical chart that illustrates the law of supply is called a **supply schedule.**

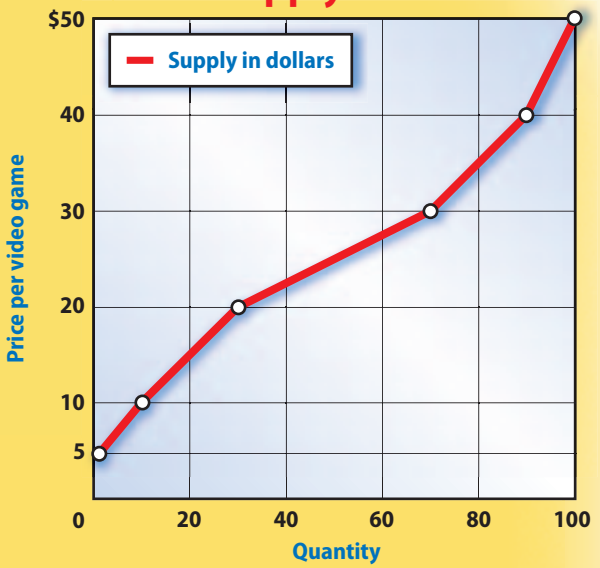
Reading Check **Explaining** What does a supply schedule show?

Spencer Platt/Getty Images

The Law of Supply

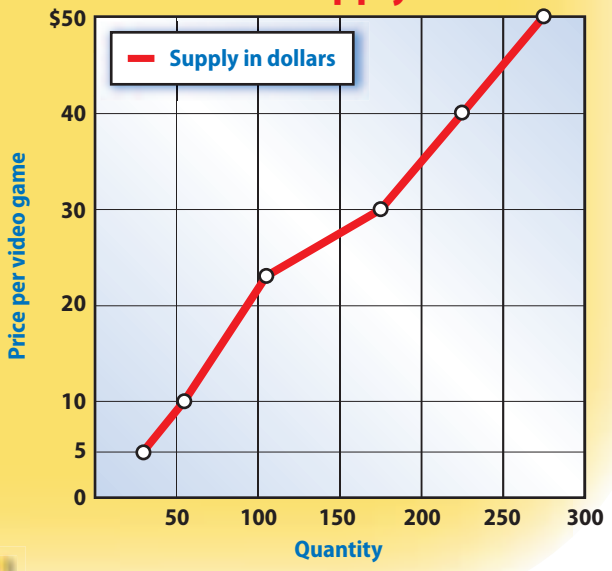
Supply Schedule	
Price per video game	Quantity
$50	100
$40	90
$30	70
$20	30
$10	10
$5	1

Software House's Supply Curve



Market Supply Schedule	
Price per video game	Total Quantity Supplied
$50	275
$40	225
$30	180
$20	105
$10	55
$5	30

Market Supply Curve



Analyzing Charts and Graphs

1. **Describing** What is the relationship between the price of a good and the quantity supplied?
2. **Explaining** The supply curve is the graphic representation of the law of supply. Why does the supply curve slope upward?

Graphing the Supply Curve

Main Idea **As with the law of demand, special tables and graphs can show the law of supply.**

Economics & You Suppose you own a company that sells television sets and the price of a set falls from $500 to $400. Would you want to supply more or fewer TV sets? Read on to find how the law of supply operates.

You have learned that we can represent the law of supply in a numerical chart called a supply schedule. We can also illustrate the law of supply with a graph.

The Individual Supply Curve

A **supply curve** is a graph that shows the amount of a product that would be supplied at all possible prices in the market. Like the demand curve, the supply curve graph is drawn with prices on the vertical axis and quantities on the horizontal axis. In the supply curve on the previous page, the quantities are the amounts of the good or service that the business will supply. Unlike the demand curve, the supply curve slopes upward. This reflects the fact that suppliers are generally willing to offer more goods and services at a higher price and fewer at a lower price.

The Profit Motive

Businesses invest time, money, and other capital resources to make money. Businesses try to set prices at a level that allows them to cover their costs. If they do not, they will lose money.

In our economy, businesses provide goods and services, hoping to make a **profit.** Profit is the money a business receives for its products or services *over and above* its costs. It is a primary **motive,** or purpose, in business.

Changes in Supply When a leak was discovered in this oil pipeline in Prudhoe Bay, Alaska, the BP company shut it down. ***Describing*** **How could this shutdown affect the price and supply of oil?**

Al Grillo/AP Images

If it costs Software House $40 to make a video game and it sells the game for $40, the company gains nothing from the sale. Making money on the sale requires selling the game for more than $40. The additional money is the owner's profit.

Producers can choose to use their profits in many different ways. They can increase wages, invest the money in the business, acquire more space, buy new equipment, or hire new workers. They can also keep the money for themselves.

Market Supply

The total of all consumers' demand is called the market demand. If you combine the supply schedules of all the businesses that provide the same good or service, the total is called the **market supply.**

An Upward Slope The figure on page 582 shows the market supply for video games in one community. Notice that the market supply for all producers is larger than the supply for the Software House alone. (Compare the graphs on page 582.) Still, the market supply curve has the same shape as the individual supply curve. The upward slope shows that all of the producers in the market would prefer to sell more video games at higher prices and fewer games at lower prices.

Price and Other Factors Keep in mind that the price is the most significant influence on the quantity supplied of any product. For example, you are offering your services for sale when you look for a job. Your economic product is your labor, and you would probably be willing to supply more labor for a high wage, or price, than you would for a low one.

However, other factors affect supply. The supply curve is drawn assuming that these and other things are fixed and do not change. If any of these factors does change, a change in supply will occur.

Reading Check **Explaining** How is market supply determined?

Changes in Supply

Main Idea **Supply increases or decreases depending on many different factors.**

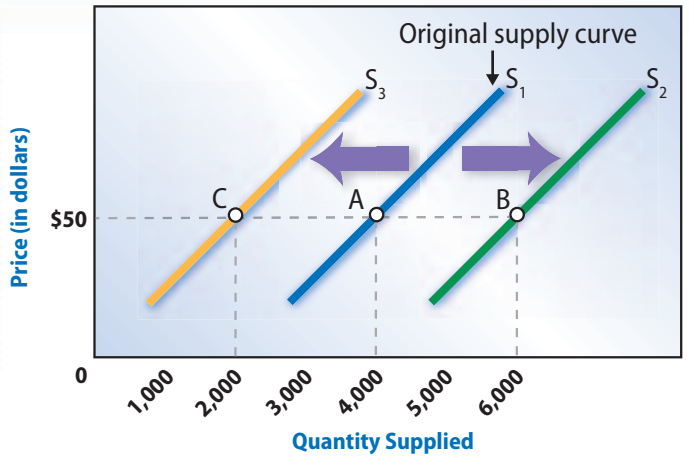
Economics & You Would you expect to pay a high price for a tomato if it were the only one in the whole grocery store? Read to find out why that tomato would probably be costly.

Just like demand, supply can increase or decrease, depending on many different factors.

Why Does Supply Change?

The profit incentive is a factor that motivates people in a market economy which pushes other factors. For a change in supply to take place, producers must decide to offer a different quantity of output at each possible price in the market.

Shifts in the Supply Curve



Analyzing Charts

1. **Explaining** What does it mean when the supply curve shifts to the left?
2. **Deducing** In what direction would new technology push the supply curve? Explain.

Mike Fiala/AP Images

When supply goes down, the supply curve moves to the left. When supply goes up, the supply curve is pushed to the right. This means suppliers are willing to sell a larger quantity of goods and services at the original price and all other prices. You can see these changes in the figure on page 584.

Factors that can affect supply include the following:

- **The Cost of Resources** When the prices of resources used to produce goods and services fall, production costs fall. Sellers are able to produce and sell more of the good. When resource prices rise, sellers are less able to produce and sell the same quantities of the good because production costs rise.
- **Productivity** When workers are more productive, a company's costs go down. More products are produced at every price. When productivity falls, it costs more for a company to produce the same amount of goods and services.
- **Technology** **Technology** refers to the methods, or processes, used to make goods and services. New technology can speed up ways of doing things and cut a business's costs. The business is willing to supply more goods and services at the same price.
- **Government Policies** In general, increased government regulations **restrict,** or limit, supply, causing the supply curve to shift to the left. A rise in the minimum wage or new safety requirements in cars can result in higher production costs, which, in turn, lead to lower production levels.
- **Taxes** To businesses, higher taxes mean higher costs, pushing the supply curve to the left. Lower taxes—lower costs—move the supply curve to the right.
- **Subsidies** A **subsidy** is a government payment to an individual, business, or other group for certain actions. Subsidies lower the cost of production. When subsidies are repealed, costs go up, and the supply curve shifts to the left.
- **Expectations** If businesses believe that consumer demand will not be very high in the near future, they will produce less of their products. If they expect demand to go up, they will produce more at all possible prices.
- **Number of Suppliers** The larger the number of suppliers, the greater the market supply. If some suppliers leave the market, market supply decreases, shifting the curve to the left.

Reading Check **Explaining** How does productivity affect supply?

Quality Control An inspector at the Indian Motorcycle plant in California works at the end of the assembly line. ***Analyzing*** **What happens to company costs if workers at the plant are more productive?**

Civics ONLINE

Student Web Activity Visit glencoe.com and complete the Chapter 21 Web Activity.

Elasticity of Supply

Main Idea **Supply elasticity measures how the quantity supplied of a good or service changes in response to changes in price.**

Economics & You What is the price of a gallon of gasoline right now? Read to find out why gasoline producers react slowly to a change in the price of gas.

Like demand, supply can be elastic or inelastic. **Supply elasticity** is a measure of how the quantity supplied of a good or service changes in response to changes in price. If the quantity changes a great deal when prices go up or down, the product is said to be supply elastic. It is elastic in the sense that like a piece of elastic it can expand out or decrease in size. If the quantity changes very little, the supply is inelastic.

Supply elasticity depends on how quickly a company can change the amount of a product it makes in response to price changes. For example, oil is supply inelastic. When oil prices go up, oil companies cannot quickly dig a new well, build a pipeline to move the oil, and build a refinery to turn it into gasoline. The same is true of other products that require producers to invest large sums of money in order to produce them.

The supply curve is likely to be elastic, however, for kites, candy, and other products that can be made quickly without huge amounts of capital and skilled labor. This is especially true of food items whose production can be quickly increased, and often is during special holiday time during the year. If consumers are willing to pay twice the price for any of these products, most producers will be able to gear up quickly to increase production.

Reading Check **Explaining** What is supply elasticity?

Section 3 Review

Vocabulary

1. **Write** sentences in which you use these key terms: *supply, law of supply, supply schedule, supply curve, profit, market supply, productivity, technology, subsidy, supply elasticity.*

Main Ideas

2. **Explain** the law of supply.
3. **Identify** four factors that can cause changes in supply.
4. **Describing** What kinds of products are considered supply elastic?

Critical Thinking

5. **Describing** What is an example of how business expectations can increase or decrease supply?
6. **BIG Ideas** Use a chart like the one below to illustrate the effect of price on supply.

Price	Effect
Increase	
Decrease	

7. **Analyzing Visuals** Study the two supply schedules on page 582. How are they similar? How are they different?

Interactive Graphic Organizer

Citizenship Activity

8. **Research** Make a list of products manufactured in your town, city, or community. Decide if each one is supply elastic or supply inelastic. Share your list with the class.
9. **Descriptive Writing** Write a short chalk talk for first graders in which you explain the law of supply. Be sure to include examples and graphic aids that your audience will understand.

Civics ONLINE

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Section 4

Demand and Supply at Work

Guide to Reading

Big Idea

Supply and demand in a market interact to determine price and the quantities bought and sold.

Content Vocabulary

- surplus *(p. 588)*
- shortage *(p. 589)*
- equilibrium price *(p. 589)*
- price ceiling *(p. 589)*
- price floor *(p. 589)*
- minimum wage *(p. 589)*

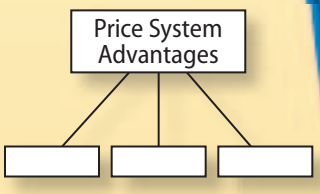
Academic Vocabulary

- mechanism *(p. 588)*
- purchase *(p. 588)*
- focus *(p. 590)*

Reading Strategy

Analyzing Cause and Effect

As you read the section, complete a diagram like the one below by describing three advantages of using prices to distribute goods and services.



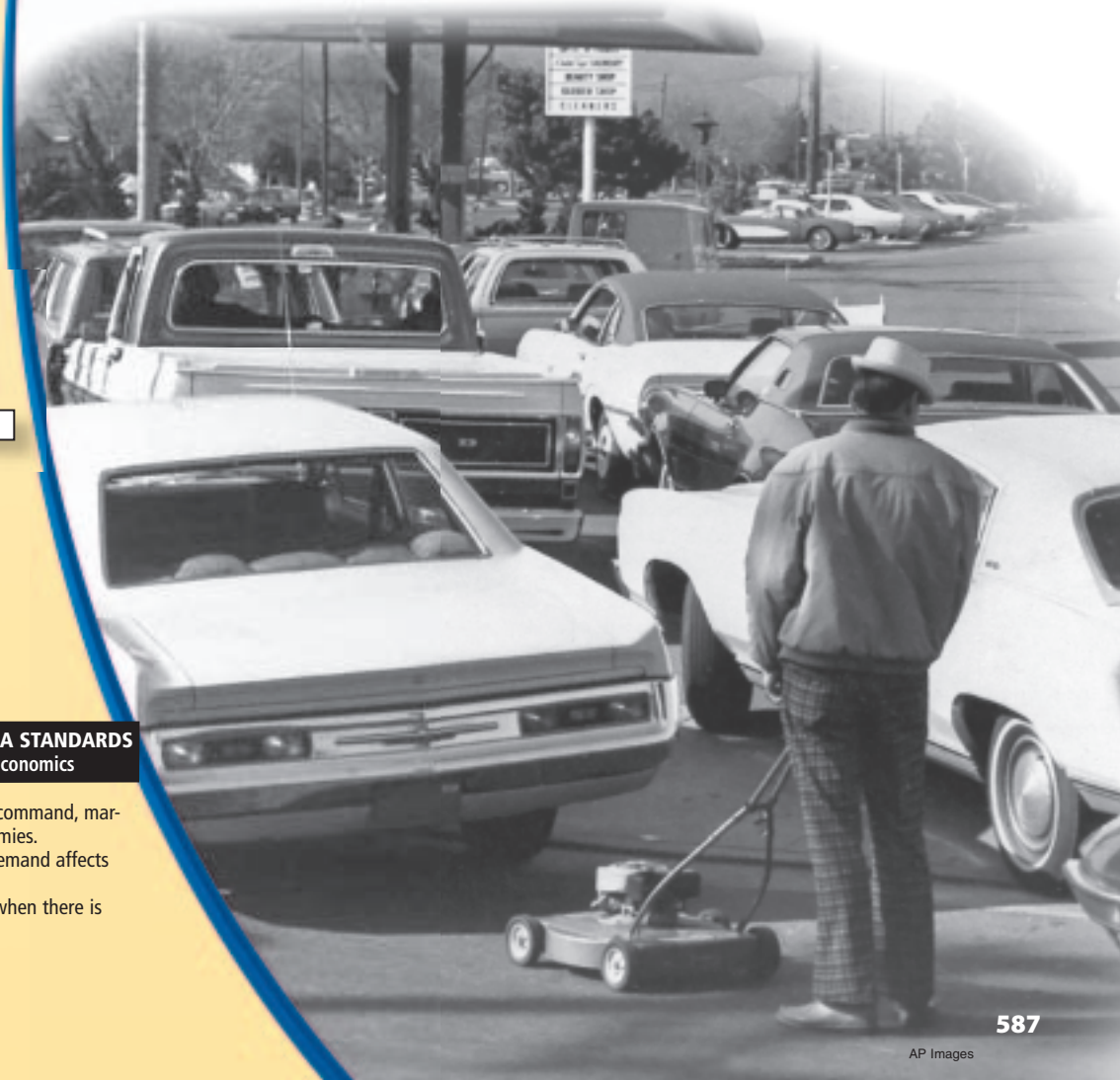
Interactive Graphic Organizer

NORTH CAROLINA STANDARDS
Civics and Economics

8.01 Compare characteristics of command, market, traditional, and mixed economies.
8.04 Illustrate how supply and demand affects prices.
8.05 Predict how prices change when there is either a shortage or surplus.

Real World Economics In 1974, U.S. gasoline customers waited in line for hours for a chance to buy fuel. At the time, several Middle Eastern nations had decided not to ship any oil to the United States. The resulting oil shortage caused the price for a gallon of gasoline to quadruple and the supply diminish. Gas stations often could not meet the demand and refused to sell their product to anyone who brought in an empty container rather than the item itself. This forced customers to wait in line with their lawn mowers and other fuel-powered tools.

A man in San Jose, California, lines up with his lawn mower to buy gas during a fuel shortage



AP Images

Markets and Prices

Main Idea **The forces of supply and demand work together in markets to establish prices.**

Economics & You Have you ever tried to bargain for a lower price on something you bought? Read to find out how economists view the process of setting prices.

As you learned earlier, a market is any **mechanism,** or place, where buyers and sellers of a good or service get together to exchange that good or service. For example, to buy corn, people might go to a farmers market or a supermarket. Someone who wants to buy stock might use a computer to **purchase,** or buy, it from a stock market. In each case, markets bring buyers and sellers together.

The forces of supply and demand work together in markets to establish prices. In our economy, prices form the basis for economic decisions.

The Price Adjustment Process

A market consists of all buyers and sellers of a product. To see how supply and demand work together, we need to combine the supply and demand curves. Look at the graph on page 589. It shows the market demand curve for video games (the line marked "D" on the graph) and the market supply curve (marked "S") for those games.

Surplus Suppose we start by watching how buyers and sellers react to a price of $40 in this market for video games. The graph shows that sellers will supply 225 video games to the market at this price. Buyers, however, are willing to buy only 150 games at $40 each. This leaves a surplus of 75 video games.

A **surplus** is the amount by which the quantity supplied is higher than the quantity demanded. The surplus also appears as the horizontal distance between the supply and demand curves at any point above where the demand and supply curves intersect.

TIME

Political Cartoons

Sidney Harris/ScienceCartoonsPlus.com

Every year, more than half of all Americans do volunteer work role in it. One of the responsibilities of citizens is to help make their of volunteer gro small. Perhaps did wh

In this cartoon, Sidney Harris is making a comment on supply and demand.

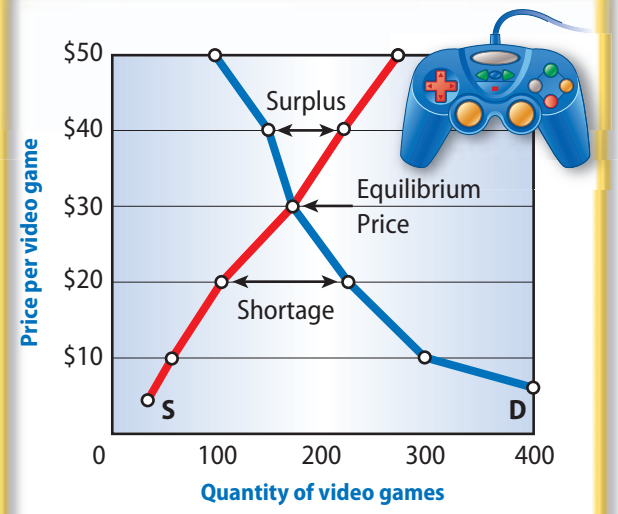
1. **Why is the store shown in the cartoon holding a sale?**
2. **What are some options that businesses have when supply exceeds demand?**
3. **Is this situation economically healthy for businesses? For consumers?**

A surplus signals that the price is too high. In that case, consumers are unwilling to pay the price in large enough numbers to satisfy producers. If the market is competitive, this surplus will not exist for long. Sellers will have to lower their prices if they want to sell their goods.

Shortage What if the price had been $20? Look at the graph again. At this price, suppliers offer only 105 video games for sale. Consumers, though, are willing to buy 230 games. This difference is a shortage. A **shortage** is the amount by which the quantity demanded is higher than the quantity supplied. The shortage is shown as the horizontal distance between the two curves at any price below the point where demand and supply cross.

A shortage signals that the price is too low. In this situation, suppliers are unwilling to sell their goods or services in large enough numbers to meet all the demand. If the market is competitive, the shortage will not last. The price will have to rise.

The Price Adjustment Process



Analyzing Graphs

1. **Defining** At what price does quantity demanded equal quantity supplied?
2. **Explaining** If the price of a product is below its equilibrium price, what is the result?

Market Forces

One of the benefits of the market economy is that it eliminates shortages and surpluses when it operates without restriction. Over time, a surplus forces the price down and a shortage forces the price up. This process goes on until supply and demand are balanced. The point where they achieve balance is the **equilibrium price.** At this price, there is neither a surplus nor a shortage. In the figure on this page, the equilibrium price for video games is $30.

Once the market price reaches equilibrium, it will tend to stay there until either supply or demand changes. Once that happens, the market will have a temporary surplus or shortage. If there is a surplus, the price will be driven down. If there is a temporary shortage, the price will be driven up. The price will move in this way until the market establishes a new equilibrium price.

Price Controls

Occasionally the government sets the price of a product because it believes that the forces of supply and demand are unfair. When this happens, the new price may favor either consumers or producers.

A **price ceiling** is a maximum price set by the government that can be charged for goods and services. For example, city officials might set a price ceiling on what landlords may charge for rent. A **price floor** is a government minimum price that can be charged for goods and services. Price floors—more common than price ceilings—prevent prices from dropping too low. The **minimum wage,** the lowest legal wage that can be paid to most workers, is a price floor.

Reading Check **Explaining** If the price of a product is above its equilibrium price, what is the result?

Prices as Signals

Main Idea **In our economy, prices are signals that help businesses and consumers make decisions.**

Economics & You Have you ever refused to buy something you thought was too expensive? Read to find out what message you may have been sending to the maker of the product.

The different parts of the economy need a system of signals so they can work smoothly together. In our economy, prices are signals. They help businesses and consumers make decisions. Prices also help answer the basic economic questions—*what* to produce, *how* to produce, and *for whom* to produce.

What Do Prices Tell Us?

For example, consumers' purchases help producers decide *what* to produce. They **focus,** or center, on providing the goods and services that consumers are willing to buy at prices that allow the suppliers to earn profits. A company will make video games as long as consumers are willing to buy them at a price that generates profits. If consumers are not willing to pay that price, the company will not be willing to make video games.

Prices also help businesses and consumers decide the question of *how* to produce. Suppose it costs a hair salon $20 in labor and supplies to provide a haircut. Consumers, though, are willing to pay only $15 for the haircut. To stay in business, the salon needs to find less costly ways of providing that haircut.

(inset)Don Ryan/AP Images, David Zalubowski/AP Images

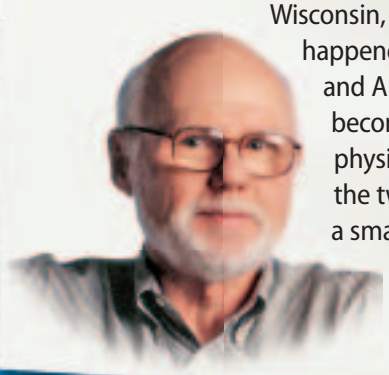
Housing Market Even when the sale of houses slows down, price reductions eventually balance supply and demand. ***Identifying*** **What is the term for a price showing there is no surplus or shortage?**

American Biography

Dick Burke (1935 –)

Like most entrepreneurs, **Dick Burke** started out thinking small. He never dreamed of leading a huge corporation. In fact, his first job at a large equipment manufacturer convinced him otherwise. "I entered a training program in Caterpillar's finance department," he explained. "After 18 months I knew that large corporations were not for me and I was not for them. Just before they fired me, I quit."

In the mid-1970s, Burke was working in Milwaukee, Wisconsin, when two things happened: Gas prices shot up, and Americans began to become more interested in physical fitness. Burke put the two together and started a small business in a red barn in the town of Waterloo, Wisconsin.



What was the product that addressed both issues? Dick Burke began making bicycle frames. He called the company Trek.

Today the company is world famous, thanks to providing the bicycles Lance Armstrong used to win seven Tour de France titles. Today, Trek has about 1,700 employees and annual revenues around $600 million.

Although the company has grown tremendously, some things have not changed. It is still located near that red barn in Waterloo. And the firm's original goals—quality products for our customers at competitive value and deliver them on time—have not changed either.

Making a Difference CITIZENSHIP

Analyzing What qualities do you think has helped make Trek a success?

Prices also help businesses and consumers decide the question of *for whom* to produce. Some businesses aim their goods or services at those consumers who are willing to pay higher prices. Other businesses aim their goods or services at the larger number of people who want to spend less.

Advantages of Prices

You know that consumers look for the best values for what they spend, while producers seek the best price and profit for what they have to sell. The information that prices provide allows people to work together to get more of the things that people want. Without prices, the economy would not run as smoothly, and decisions about allocating goods and services would have to be made some other way.

Prices Are Neutral First, prices in a competitive market economy are neutral because they favor neither the producer nor the consumer. Prices are the result of competition between buyers and sellers. In this way, prices represent compromises with which both sides can live. The more competitive the market is, the more efficient the price adjustment process.

Prices Are Flexible Second, prices in a market economy are flexible. Unforeseen events such as war and natural disasters affect the supply and demand for items. Buyers and sellers react to the new level of prices and adjust their consumption and production accordingly. Before long, the system functions as smoothly as it had before. The ability of the price system to absorb unexpected "shocks" is one of its strengths.

Trek Bikes

Prices and Freedom of Choice Third, the price system provides for freedom of choice. Because a market economy typically provides a variety of products at a wide range of prices, consumers have many choices. If the price is too high, a lower-priced product can usually be found. Even if a suitable alternative cannot be found, no one forces the consumer to pay a certain price for a product in a competitive market economy.

Competitive markets tend to find their own prices without outside help or interference. No bureaucrats need to be hired, no committees formed, no laws passed, or other decisions made. Even when prices adjust from one level to another, the change is usually so gradual that people hardly notice.

In command economies, such as those found in Cuba and North Korea, consumers face limited choices. Government planners determine the total quantity of goods produced—the number of radios, cars, toasters, and so on. The government then limits the product's variety to keep production costs down. Items such as food, transportation, and housing are offered to citizens at artificially low prices, but seldom are enough produced to satisfy everyone. Many people go without.

Prices Are Familiar Finally, prices are something that we have known about all our lives—from the time we were old enough to ask our parents to buy us something to the age where we were old enough to buy it ourselves. As a result, prices are familiar and easily understood. There is no doubt about a price—if something costs $4.99, then we know exactly what we have to pay for it. This allows people to make decisions quickly and efficiently.

Reading Check **Explaining** What signal does a high price send to buyers and sellers?

Section 4 Review

Vocabulary

1. **Write** a paragraph in which you use these key terms: *surplus, shortage, equilibrium price, price ceiling, price floor, minimum wage.*

Main Ideas

2. **Identifying** What is the point called at which the quantity demanded of a product and the quantity supplied meet?
3. **Explaining** What causes prices to rise—a shortage or a surplus of a good or service? Explain why.

Critical Thinking

4. **Demonstrating** If a firm charges a price below the equilibrium price, what will be the result? Explain.
5. **BIG Ideas** Create a diagram like the one below to show how shortages and surpluses affect prices of goods and services.

Cause	→	Effect

6. **Analyzing Visuals** Study the graph of the price adjustment process on page 589. Does a price of $40 result in a surplus or a shortage? What is the equilibrium price?

Citizenship Activity

7. **Research** Compare the prices of the same product at three different stores. What conclusion can you draw about the equilibrium price for the product from the individual prices?
8. **Persuasive Writing** Do you think the government should ever set price ceilings or price floors? Write a letter to the editor of your local newspaper stating and supporting your view.

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Interactive Graphic Organizer

Chapter 21

Visual Summary

Demand and Supply

Demand is the desire, willingness, and ability to buy a good or service.

Market demand is the total demand of all consumers for a product or service.

Several different factors can cause market demand for a product or service to change.

Demand elasticity is the extent to which a change in price causes a change in the quantity demanded.

Farmers market in California

Supply is the quantity of a good or service that producers are willing to sell at all possible market prices.

Supply increases or decreases depending on many different factors.

Supply elasticity measures how the quantity supplied of a good or service changes in response to changes in price.

The forces of supply and demand work together in markets to establish prices. In our economy, prices are signals that help businesses and consumers make decisions.

Supply of soccer balls for sale

Shoppers at bulk store

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Chapter 21

North Carolina End-of-Course Test Civics and Economics Practice

TEST-TAKING TIP

When working numerical problems out on scrap paper, make sure you copy numbers correctly, not transposing or dropping any figures.

Reviewing Vocabulary

Directions: Choose the word(s) that best completes the sentence.

1. A _____ is a graph that shows the amount of a product that would be bought at all prices in the market.

A supply curve **C** demand curve
B law of demand **D** market demand

2. Some products, such as DVD players and DVDs, are called _____ because demand for one moves in the opposite direction as the price of the other.

A substitutes **C** elastic
B surplus **D** complements

3. The methods or services used to make goods and services are called _____.

A factors **C** resources
B technology **D** production

4. At the _____ price there is neither a surplus nor a shortage.

A profitable **C** exchange
B ceiling **D** equilibrium

Reviewing Main Ideas

Directions: Choose the best answer for each question.

Section 1 *(pp. 568–572)*

5. According to the law of demand, quantity demanded and price _____.

A move in the same direction
B depend on marginal utility
C move in opposite directions
D are not related

6. Diminishing marginal utility is the explanation for the consumer's decision to _____.

A spend less money for sale items
B buy only one dessert with a meal
C purchase more CDs of a favorite singer
D buy expensive gifts for close friends

Section 2 *(pp. 573–578)*

7. Total demand may change if more consumers enter the market, consumer tastes change, or _____.

A consumer expectations change
B substitutes become popular
C demand is inelastic
D supply remains the same

Section 3 *(pp. 580–586)*

8. Businesses invest time, money, and other capital resources for the primary motive of _____.

A paying good wages
B supplying better products
C making a profit
D satisfying customers' needs

Section 4 *(pp. 587–592)*

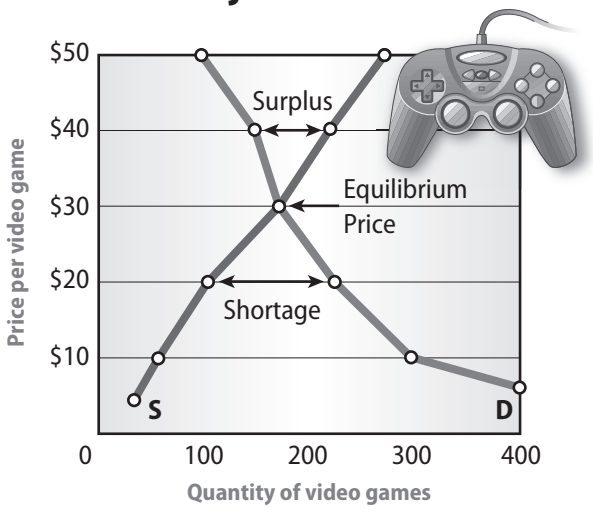
9. One of the strengths of a market economy is that _____.

A prices absorb some of the shocks or unexpected changes in the economy
B most consumers can afford plenty of the goods and services they want
C producers almost always make a profit
D demand is never greater than supply

Critical Thinking

Directions: Base your answers to questions 10 and 11 on the graph below and your knowledge of Chapter 21.

Price Adjustment Process



10. The price adjustment graph shows that at a price of more than $30 _____.

A consumer demand would increase

B the cost of production would have to be more than $40

C supply would increase and cause a surplus

D supply would decrease, causing a shortage

11. The graph illustrates that at the equilibrium price of video games _____.

A producers will supply nearly 200 units

B consumers will demand more than 200 units

C demand will fall

D there may be a shortage of games

Document-Based Questions

Directions: Analyze the following document and answer the short-answer questions that follow.

A price ceiling is a government-set maximum price that can be charged for goods and services. Below, a city sets such a maximum price for rent in the Washington, D.C., area.

> *No landlord shall charge a monthly rent for any controlled rental unit in an amount more than the fair market rent level established annually by the Department of Housing and Urban Development for the Washington Metropolitan Statistical Area for a four-bedroom unit or 1% of the property's assessed value for property taxes in a given year, whichever is greater. . . . Beginning in January 2007 and every three years thereafter, the City Council may reconsider the criteria for the establishment of rent ceilings based, among other factors, on the triennial reassessments of properties in the City.*
>
> —City of College Park (Md.)

12. For what period of time will each rent ceiling be set by the city government? Why will the council review the rent ceiling periodically?

13. Does a ceiling benefit renters or landlords? If the price of a product is set below its equilibrium price, what is the likely result?

Informational Writing

14. Do you think that the rent ceiling will provide more low cost housing in the area in the long term? Write a paragraph describing the possible results of rent ceilings that are set below the equilibrium price.

STOP

Civics ONLINE

For additional test practice, use Self-Check Quizzes—Chapter 21 on glencoe.com.

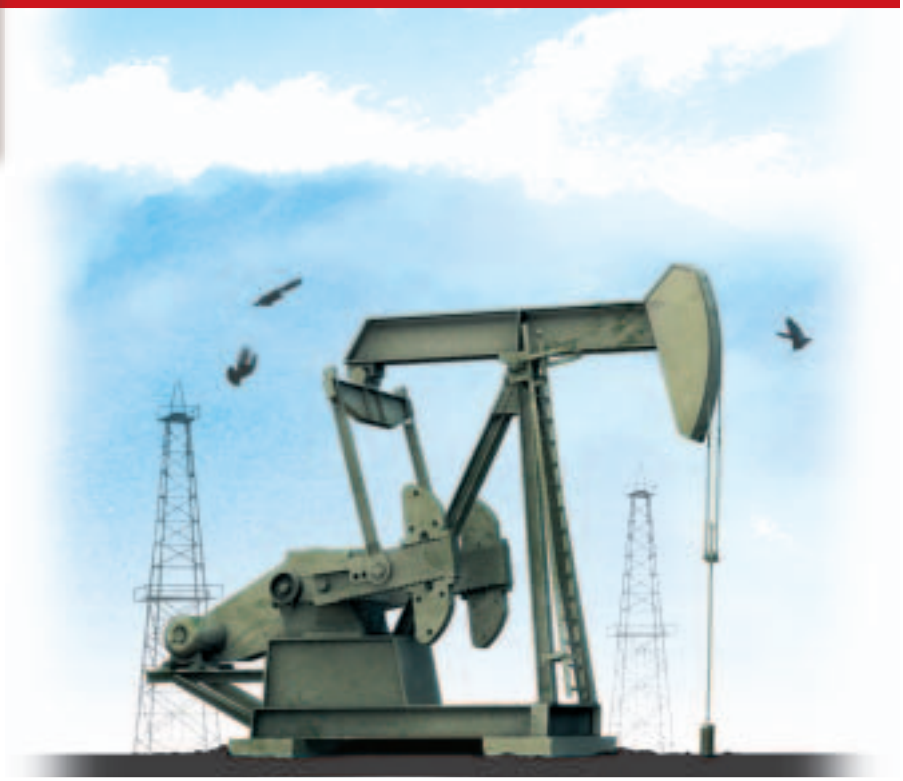
Need Extra Help?

If you missed question. . .	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Go to page. . .	569	576	585	589	569	572	574	583	589	589	589	584	584	584

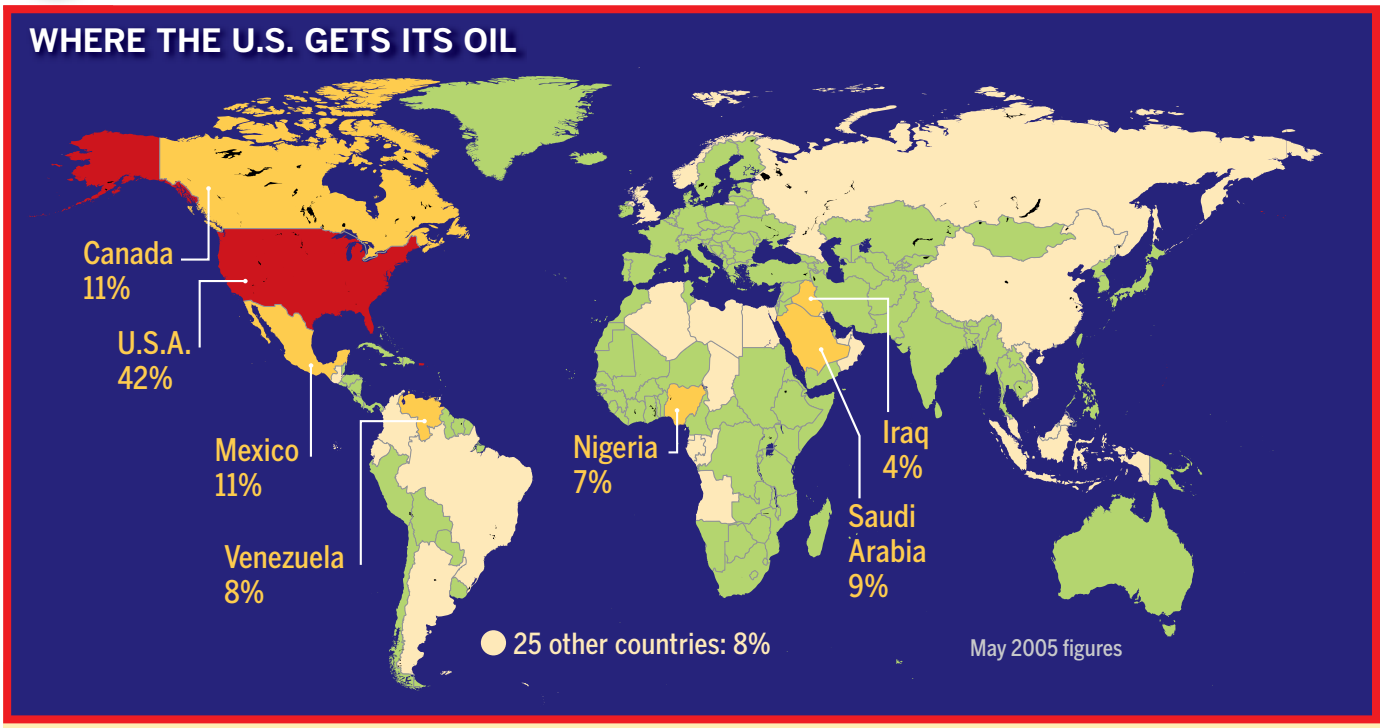
TIME REPORTS

Oil and Gas Consumption in the U.S.

America's addiction to oil is getting ever more costly for car-loving consumers and energy-dependent industries



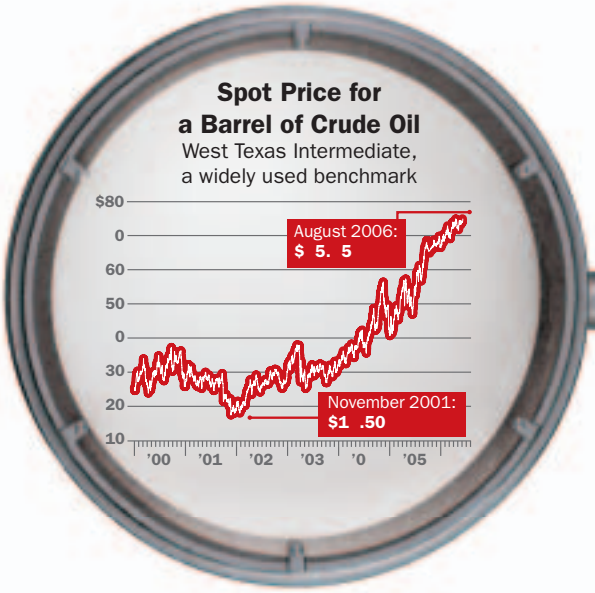
1 The U.S. is the world's biggest oil consumer—and importer



■ Americans account for **4.5%** of the world's population but guzzle **25%** of the planet's petroleum output. On a typical day, the U.S. consumes **21 million barrels** of oil—more than any other country.

■ About **58%** of America's oil is imported from other countries. As the map above shows, most of America's oil imports come from **outside the Middle East**. Canada and Mexico are major suppliers of U.S. oil.

■ The U.S. holds **700 million barrels** of oil in the **Strategic Petroleum Reserve**. That's equivalent to about 70 days' worth of imports. This emergency oil supply is stored at four sites on the Gulf of Mexico.



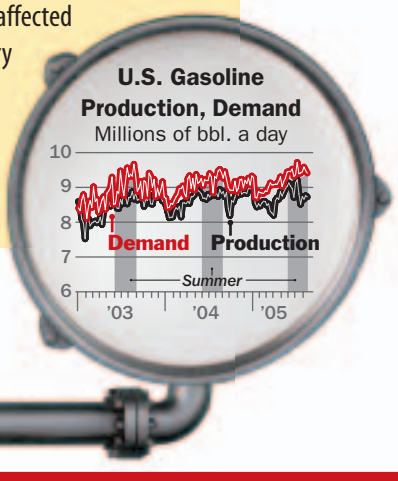
2 Demand for oil is soaring

The U.S. has long been the dominant customer for the world's oil, buying more than China, Japan, and Germany combined in 2005. By 2025, U.S. oil consumption is projected to increase 32%. At current rates of consumption, the known oil supply will be exhausted by the middle of the 21st century.

3 As oil prices rise, the effects ripple through the economy

Higher oil prices mean higher gasoline prices, since gasoline is produced by refining crude oil. The U.S. consumes nearly 400 million gallons of gasoline every day, most of it going into cars and trucks. The impact of rocketing gas prices stretches well beyond the pump:

- **Airlines** are among the hardest hit, with each penny increase in the per-gallon price of jet fuel costing the industry $180 million annually. For the first time in decades, major carriers are spending more for fuel than they are for labor. That means higher fares for passengers.
- **Delivery companies** like FedEx and U.P.S. also suffer; many have added surcharges to help cover rising costs.
- **Farmers** from coast to coast are affected as the cost of operating machinery and irrigation systems rises.
- And **retailers** suffer because it costs more for goods—and for customers—to reach stores.



Sources: Energy Information Administration; Bureau of Labor Statistics; TIME Graphic by Lon Tweeten, Jackson Dykman, Kristina Dell and Jeremy Caplan.

George Hall/Corbis

FEELING THE IMPACT Every dollar jump in the price of oil costs the major U.S. airlines $365 million more in fuel per year.