Simulations and Problems 4, 5

Directions:

that you think an economist would approve.

Name

D EMAND

or services. Several factors affect demand, including the quantity demanded, diminishing utility apply to your products? Mark the point on each demand curve at which the consumer would make no mistake)

MAKING GENERALIZATIONS ABOUT

7.

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PROCESS

Teaching Transparency

Application and Enrichment

Consumer Applications Activity 5

Free Enterprise Activity 12

Name

D EMAND

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HOLLYWOOD SHOES, INC.
Putting Supply and Demand Together
• How is the equilibrium price determined?
• How do changes in equilibrium price occur?
• How do shortages and surpluses affect price?
• How do price ceilings and price floors restrict the free exchange of prices?

Content Standard 7 Students will understand that markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.

Content Standard 8 Students will understand that prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives.

Voluntary Standards Emphasized in Chapter 7
• Focus: High School Economics
• MCG–Economics and Entrepreneurship
• Capstone: The Nation’s High School Economics Course

To order these materials, or to contact your State Council on Economic Education about workshops and programs, call 1-800-338-1192 or visit the NCEE Web site at http://www.nationcouncil.org

Chapter 7 Resource Manager

Block Schedule

ACTIVITY
From the Classroom of
Richard Joyce
Wilmington High School
Wilmington, Illinois

Demand, Supply, and the “Blinker” Test
Demand and supply curves shift when the left or right when demand or supply as a whole changes. To help students remember the direction of the change, use the “blinker” test. Ask: When driving a car, if you push the blinker (turn signal) control up, which way are you turning? (right) Remember that an increase in demand or supply always moves the curve to the right. Ask: Which way do you push the blinker (turn signal) control when you are turning left? (down) So when demand or supply decreases, the curve always shifts to the left. Repeat with the class “up to the right, down to the left.”

Content Standard 9 Students will understand that the government can allocate scarce resources by price controls to achieve social objectives.

Content Standard 10 Students will understand that the government allocates scarce resources through the use of permits, licenses, and regulations.

Content Standard 11 Students will understand that a government's budget is a statement of proposed taxing and spending policies.

Key to Ability Levels
L1 BASIC activities for all students
L2 AVERAGE activities for above-average students
L3 CHALLENGING activities for above-average students
ELL ENGLISH LANGUAGE LEARNER activities

Easy Planning and Preparation!

Use Glencoe’s Presentation Plus!, a Microsoft PowerPoint® application, to teach Demand and Supply. With this multimedia teacher tool, you can customize ready-made presentations. At your fingertips are interactive transparencies, on-screen lecture notes, audio-visual presentations, and links to the Internet and to other Glencoe multimedia.

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Planning has never been easier! Organize your week, month, semester, or year with all the lesson helps you need to make teachers creative, timely, and relevant—the way it is meant to be. The Interactive Lesson Planner opens Glencoe’s Chapter 7 resources, helps you build your schedule, and tracks your progress.

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Chapter 7 Resource Manager

Reading Objectives Reproducible Resources Technology/Multimedia Resources

Section 1 Demand
• How does the principle of voluntary exchange operate in a market economy?
• What does the law of demand state?
• How do the real income effect, the substitution effect, and diminishing marginal utility relate to the law of demand?

Section 2 The Demand Curve and Elasticity of Demand
• What is the demand curve?
• What are the determinants of demand?
• How do changes in demand affect the price of a given product?

Section 3 The Law of Supply and the Supply Curve
• What does the law of supply state?
• How does the principle of voluntary exchange operate in a market economy?
• What are the determinants of supply?
• How does the elasticity of demand change when supply or demand as a whole changes?

Section 4 Putting Supply and Demand Together
• How is the equilibrium price determined?
• How do changes in equilibrium price occur?
• How do shortages and surpluses affect price?
• How do price ceilings and price floors restrict the free exchange of prices?

Block Schedule

Activities that are particularly suited to use within the block scheduling framework are identified throughout this chapter by the following designation: BLOCK SCHEDULING

AVERAGE
L1
Basic activities for all students
L2
Average activities for above-average students
L3
Challenging activities for above-average students
ELL
English language learner activities

National Council on Economic Education

THE ECONOMICS AMERICA AND ECONOMICS INTERNATIONAL

Voluntary Standards Emphasized in Chapter 7

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• How is the equilibrium price determined?
• How do changes in equilibrium price occur?
• How do shortages and surpluses affect price?
• How do price ceilings and price floors restrict the free exchange of prices?
**Chapter Overview**

Consumers base their decisions to buy goods and services on anticipated satisfaction, price, and their incomes. Businesses set prices according to their profit desires, the demand anticipated, and the competition expected. Chapter 7 discusses the laws of supply and demand and the ways in which a voluntary market affects them.

---

**CHAPTER 7**

**Demand and Supply**

**Why It's Important:**
Why do some CDs cost more than others? Why does the price of video rentals go down when another video store opens in the neighborhood? This chapter will explain the relationship between demand and supply—and how this relationship determines the prices you pay.

---

**SECTION 1**

**Demand**

The word demand has a special meaning in economics. Delta's catalog may be sent to 4 million people, but that doesn't mean 4 million people demand clothes from the retailer. Many girls may want to order items from the catalog. As you read this section, however, you'll learn that demand includes only those people who are willing and able to pay for a product or service.

**The “Marketplace”**

When you buy something, do you ever wonder why it sells at that particular price? Few individual consumers feel they have any influence over the price of an item. In a market economy, the laws of demand and supply operate—always and everywhere.

---

**CHAPTER LAUNCH ACTIVITY**

In 1998 the President of the United States earned a salary of $200,000 plus a $50,000 expense account. That same year Mike Piazza signed a seven-year contract to play baseball for the New York Mets for $13 million per year—more than 50 times the President’s annual salary. **ASK: Why do major league players get paid higher salaries than the President of the United States? Discuss the effects of demand for and supply of slotted players. Point out nonfinancial incentives for a person to run for the presidency (leadership, political objectives, service to nation). Contrast public and private sector salaries and discuss reasons for the disparity.**

---

**READER’S GUIDE**

**Terms to Know**
- demand
- supply
- market
- voluntary exchange
- law of demand
- quantity demanded
- real income effect
- substitution effect
- utility
- marginal utility
- law of diminishing marginal utility

**Questions**
1. **How does the principle of voluntary exchange operate in a market economy?**
2. **What does the law of demand state?**
3. **How do real income effect, the substitution effect, and diminishing marginal utility relate to the law of demand?**

---

**BELLRINGER**

**Motivational Activity**

**Project Daily Focus Transparency 9**

Transparency 9 and have students answer the questions. This activity is also available as a blackline master.

---

**Dear Students**

On the back of this transparency, you'll find a “Thinking About the Reading” section. Do the study guide questions now. The answers are on page 175. You can complete the transparency as a class or as a blackline master. You can also use the questions to introduce a discussion of the **Terms to Know.**

---

**TERMS TO KNOW**

- demand
- supply
- market
- voluntary exchange
- law of demand
- quantity demanded
- real income effect
- substitution effect
- utility
- marginal utility
- law of diminishing marginal utility

---

**PRETECTING VOCABULARY**

As students work in small groups to create improvisational scenes about buying goods in a store. Each scene should illustrate one of the Terms to Know. *Vocabulary PuzzleMaker*

---

**MULTIMEDIA**

- Daily Focus Transparency 9
- Vocabulary PuzzleMaker
- ExamView® Pro Testmaker
- Interactive Tutor Self-Assessment Software
- Interactive Economics!
Chapter 7

SECTION 1, Pages 169–175

2 Teach

Guided Practice

L1 Classifying Encourage students to discuss the reasons for the choices they made during their most recent purchases. Have them tell whether the reasons came under the real income effect, the substitution effect, or the law of diminishing marginal utility.

Daily Lecture Notes 7–1

SECTION 1, Pages 169–175

Call on volunteers to identify other examples of local, national, and international markets. 
Answer: voluntary exchange

Visual Instruction FIGURE 7.1

FIGURE 7.1

Markets A market is a place where buyers and sellers come together. What is the basis of activity in a market economy?

- **Demand**: the amount of a good or service that consumers are able and willing to buy at various possible prices during a specified time period.
- **Supply**: the amount of a good or service that producers are able and willing to sell at various possible prices during a specified time period.

**Market**: the process of freely exchanging goods and services between buyers and sellers.

**Voluntary Exchange**: a transaction in which the buyer and seller exercise their economic freedom by working out their own terms of exchange.

**Voluntary Exchange**

The basis of activity in a market economy is the principle of voluntary exchange. A buyer and a seller exercise their economic freedom by working toward satisfactory terms of an exchange. For example, the seller of an automobile sets a price based on his or her view of market conditions, and the buyer, through the act of buying, agrees to the product and the price. In order to make the exchange, both the buyer and the seller must believe they will be better off—if or happier—after the exchange than before.

The supplier’s problem of what to charge and the buyer’s problem of how much to pay is solved voluntarily in the market exchange. Supply and demand analysis is a model of how buyers and sellers operate in the marketplace. Such analysis is a way of explaining cause and effect in relation to price.

**The Law of Demand**

Demand, in economic terms, represents all of the different quantities of a good or service that consumers will purchase at various prices. It includes both the willingness and the ability to pay. A person may say he or she wants a new CD. Until that person is both willing and able to buy it, however, no demand for CDs has been created by that individual.

The law of demand explains how people react to changing prices in terms of the quantities demanded of a good or service. There is an inverse, or opposite, relationship between quantity demanded and price. The law of demand states:

As price goes up, quantity demanded goes down. 
As price goes down, quantity demanded goes up.

**Meeting Special Needs**

English Language Learners: Students with limited English vocabularies may have difficulty understanding phrases such as “real income effect,” “substitution effect,” and “diminishing marginal utility.” Write the phrases on the board, and have student volunteers draw illustrations with stick figures under each phrase that visualize these concepts.

Cooperative Learning

Organize students in teams of three to play the “Up or Down?” game. Select two teams and give each team member a flash card on which a large arrow is drawn. Present scenarios—for example, the price of CDs goes up, but income remains the same. Then ask, “Will quantity demanded go up or go down?” Team members should display their flash cards with the arrow pointing in the correct direction. If any team member displays the flash card incorrectly, that team is disqualified, and a new team joins the game. Continue the game until all teams have competed.
### Real Income Effect

No one—not even the wealthiest person in the world—will ever be able to buy everything he or she might possibly want. People’s incomes limit the amount they are able to spend. Individuals cannot keep buying the same quantity of a good if its price rises while their income stays the same. This concept is known as the real income effect on demand.

Suppose that you normally fill your car’s gas tank twice a month, spending $15 each time. This means you spend $30 per month on gasoline. If the price of gasoline rises, you may have to spend $40 per month. If the price continues to rise while your income does not, eventually you will not be able to fill the gas tank twice per month because your real income, or purchasing power, has been reduced. In order to keep buying the same amount of gasoline, you would need to cut back on buying other things. The real income effect forces you to make a trade-off in your gasoline purchases. The same is true for every item you buy, particularly those you buy on a regular basis. See Figure 7.2.

### Substitution Effect

Substitution effect Suppose there are two items that are not exactly the same but which satisfy basically the same need. Their relative costs are different. 

**Example:** Suppose, for example, that you listen to both CDs and audiocassettes. If the price of audiocassettes drops dramatically, you will probably buy more cassettes and fewer CDs. Alternately, if the price of one rises in relation to the price of the other, people will likely buy it instead of the other, now higher-priced, good. If the cost is about the same. If the price of one falls, people will most probably buy more of that item. 

### Extending the Content

#### Marginal Utility

In some ways, marginal utility frustrated early economists because they wanted a numerical measure of utility, much like prices or quantity demanded. They tried a hypothetical measurement called a util, but they soon had to abandon any notions of a marginal utility measurement because utility is subjective. To illustrate, if 20 people were asked how much satisfaction they received from a second glass of lemonade, each one would give a different answer. Economists later developed the concept of indifference curves (a topic usually covered in college classes), which can be used to derive all of the propositions in economics without having to actually measure utility.
At some point, you will stop buying soft drinks. Perhaps you don’t want to wait in the concession line anymore. Perhaps your stomach cannot handle another soft drink. Just the thought of another cola makes you nauseated. At that point, the satisfaction that you receive from the soft drink is less than the value you place on the $3 that you must pay. As Figure 7.3 shows, people stop buying an item when one event occurs—when the satisfaction from the next unit of the same item becomes less than the price they must pay for it.

What if the price drops? Suppose the owner of the ballpark decided to sell soft drinks for $2 each after the fifth inning. You might buy at least one additional soft drink. Why? If you look at the law of diminishing marginal utility again, the reason becomes clear. People will buy an item to the point at which the satisfaction from the last unit bought is equal to the price. At that point, people will stop buying. This concept explains part of the law of demand. As the price of an item decreases, people will generally buy more.

Understanding Key Terms
1. Define demand, supply, market, voluntary exchange, law of demand, quantity demanded, real income effect, substitution effect, utility, marginal utility, law of diminishing marginal utility.

Applying Economic Concepts
3. Diminishing Marginal Utility Describe an instance in your own life when diminishing marginal utility caused you to decrease your quantity demanded of a product or service.

Critical Thinking Activity
6. Making Predictions Imagine that you will sell popcorn at the local football stadium. Knowing about diminishing marginal utility, how would you price your popcorn after half-time?

Key Terms
- marginal utility: an additional amount of satisfaction
- law of diminishing marginal utility: the principle that the additional satisfaction a consumer gets from purchasing one more unit of a product will lessen with each additional unit purchased

Cooperative Learning
Point out to students that businesses sometimes engage in price wars to attract consumers. Then organize students into several groups and ask groups to research recent price wars in the gasoline and airline industries to discover the impact on demand. Encourage groups to present their findings in illustrated reports.
In this chapter you learned how demand can increase as tastes and preferences change. In the following article, read to learn how one entrepreneur was successful in increasing demand for Gap clothing.

Daddy GAP

By the way he talks, you’d think Millard S. Drexler was the chief of some fragile startup instead of the CEO at powerhouse apparel retailer Gap Inc. Virtually no detail—from window displays to fabric blends—is too minute to escape the 54-year-old’s attention. Every week, Drexler strolls anonymously into Gap stores from coast to coast to schmooze with consumers and clerks alike in a constant drive to improve the company’s products and services.

This hands-on style has been Drexler’s trademark since he took the helm at Gap in 1995. Never mind that he runs a company of 199,000 workers in one of the most mature industries around. To Drexler, Gap is still a fledgling. “We are limited only by our imagination,” he says.

Imagination is something that Drexler, known for his marketing and merchandising savvy, has plenty of. In a cluttered marketplace, he has managed to create distinct identities for Gap, Banana Republic, and Old Navy brands. Memorable TV ads over the past years include “jump and jive” dancers for Gap and zany spots for Old Navy.

All that has helped Gap soar, reversing the flat performance of the early ’90s even when many other retailers have struggled: Thanks to strong showings at all of its divisions, Gap is expected to earn $775 million, up 45% from last year, on estimated revenues of $8.8 billion in 1998. And then there’s Gap’s success on the Internet. Experts say Gap has one of the most popular shopping sites around.

—Reprinted from January 11, 1999 issue of BusinessWeek.

SECTION 2

The Demand Curve and Elasticity of Demand

SECTION QUIZ

1. How did Drexler create distinct identities for his brands?
2. What evidence in the article shows Drexler’s focus on his customers’ tastes and preferences moving away from Gap?

Answers to Think About It

1. He used unique television advertising to identify his brands.
2. He likes to walk around his stores and talk with customers and clerks, and he pays attention to details like window displays and fabric blends.

BELLINGER

Motivational Activity

Project Daily Focus Transparency 10 and have students answer the questions.

This activity is also available as a blackline master.

Daily Focus Transparency 10

Readers’ Guide

Answers to the Reading Objectives questions are on page 185.

Preteaching Vocabulary

Write the term elastic demand on the board. Then place a large rubber band over your hands. Move your hands to stretch and ease the band. As you move your hands, ask students to guess what the term might mean.

Vocabulary PuzzleMaker

76 CHAPTER 7

Demand and Supply

177

SECTION 2, Pages 177–185

1 Focus

Overview

Section 2 explains or describes graphing the demand curve, what factors determine demand, and elastic and inelastic demand.

ECONOMICS & YOU

NOVEMBER 30, 1998

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NBR's Economics & You

ExamView® Pro Testmaker

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ExamView® Pro Testmaker

NBR's Economics & You
in a visual way? It is said that a picture is worth a thousand words. For much of economic analysis, the “picture” is a graph that shows the relationship between two statistics or concepts.

The law of demand can be graphed. As you learned in Section 1, the relationship between the quantity demanded and price is inverse—as the price goes up, the quantity demanded goes down. As the price goes down, the quantity demanded goes up.

Take a look at Parts A, B, and C of Figure 7.4. The series of three parts shows how the price of goods and services affects the quantity demanded at each price. Part A is a demand schedule—a table of prices and quantity demanded. The numbers show that as the price per CD decreases, the quantity demanded increases. For example, at a cost of $20 each, 100 million CDs will be demanded. When the cost decreases to $12 each, 900 million CDs will be demanded.

In Part B, the numbers from the schedule in Part A have been plotted onto a graph. The bottom (or horizontal) axis shows the quantity demanded; the side (or vertical) axis shows the price per CD. Each pair of price and quantity demanded numbers represents a point on the graph. These points are labeled A through K.

Now look at Part C of Figure 7.4. When the points from Part B are connected with a line, we end up with the demand curve. A demand curve shows the quantity demanded of a good or service at each possible price. Demand curves slope downward (all left to right). In Part C you can see the inverse relationship between price and quantity demanded.

### FIGURE 7.4 Graphing the Demand Curve

**Part A Demand Schedule**

<table>
<thead>
<tr>
<th>Price per CD</th>
<th>Quantity Demanded (in millions)</th>
<th>Points in Part B</th>
</tr>
</thead>
<tbody>
<tr>
<td>$20</td>
<td>100</td>
<td>A</td>
</tr>
<tr>
<td>$19</td>
<td>200</td>
<td>A</td>
</tr>
<tr>
<td>$18</td>
<td>300</td>
<td>A</td>
</tr>
<tr>
<td>$17</td>
<td>400</td>
<td>A</td>
</tr>
<tr>
<td>$16</td>
<td>500</td>
<td>A</td>
</tr>
<tr>
<td>$15</td>
<td>600</td>
<td>A</td>
</tr>
<tr>
<td>$14</td>
<td>700</td>
<td>A</td>
</tr>
<tr>
<td>$13</td>
<td>800</td>
<td>A</td>
</tr>
<tr>
<td>$12</td>
<td>900</td>
<td>A</td>
</tr>
<tr>
<td>$11</td>
<td>1,000</td>
<td>A</td>
</tr>
<tr>
<td>$10</td>
<td>1,100</td>
<td>A</td>
</tr>
</tbody>
</table>

**Part B Plotting Quantity Demanded**

Note how the price and quantity demanded numbers in the demand schedule (Part A) have been transformed to a graph in Part B above. Use letter E. Note that it represents a number of CDs demanded (900) at a specific price ($12).

**Part C Demand Curve for CDs**

The points in Part B have been connected with a line in Part C above. This line is the demand curve, which always falls from left to right. How many CDs will be demanded at a price of $12 each?

---

**Meeting Special Needs**

**Visual Learning Difficulty**

Students with visual difficulties may find the graphing techniques presented in this section helpful. Encourage students to use graphing as a way of taking notes and summarizing information throughout the course. You might suggest that students use rulers or index cards to help them keep track of columns and rows when they interpret tables and charts.

---

**Free Enterprise Activity**

To increase students’ understanding of the effects of a change in demand in a free enterprise economy, present the following scenario: A disease destroys much of the coffee crop in South America. How might this affect the price of coffee? The price increases. The demand for substitute products? Demand for substitute drinks, such as soft drinks and juices, might increase. The demand for complementary products? Demand for complementary products, such as sugar, might fall. Have students present these changes in the form of graphs.

---

**Economics Online**

Student Web Activity Visit the Economics Today and Tomorrow Web site at ett.glencoe.com and click on Chapter 7—Student Web Activities to see how changes in population affect demand.
Quantity Demanded vs. Demand

Remember that quantity demanded is a specific point along the demand curve. A change in quantity demanded is caused by a change in the price of the good, and is shown as a movement along the demand curve. Sometimes, however, something other than price causes demand to change as a whole to increase or decrease. This is known as a change in demand and is shown as a shift of the entire demand curve to the left (decrease in demand) or right (increase in demand). If demand increases, people will buy more per year at all prices. If demand decreases, people will buy less per year at all prices. What causes a change in demand as a whole?

Determinants of Demand

Many factors can affect demand for a specific product. Among these factors are changes in population, changes in income, changes in people’s tastes and preferences, the existence of substitutes and the existence of complementary goods.

Changes in Population

When population increases, opportunities to buy and sell increase. Naturally, the demand for most products increases. This means that the demand curve for, say, television sets, shifts to the right. At each price, more television sets will be demanded simply because the consumer population increases. Look at Part A of Figure 7.5 on page 182.

Changes in Income

The demand for most goods and services depends on income. Your demand for CDs would certainly decrease if your income dropped in half and you expected it to stay there. You would buy fewer CDs at all possible prices. The demand curve for CDs would shift to the left as shown in Part B of Figure 7.5 on page 182. If your income went up, however, you might buy more CDs even if the price of CDs doubled. Buying more CDs at all possible prices would shift the demand curve to the right.

Changes in Tastes and Preferences

One of the key factors that determine demand is people’s tastes and preferences. Tastes and preferences refer to what people like and prefer to choose. When an item becomes a fad, more are sold at every possible price. The demand curve shifts to the right as shown in Part C of Figure 7.5 on page 183.

Substitutes

The existence of substitutes also affects demand. People often think of butter and margarine as substitutes. Suppose that the price of butter remains the same and the price of margarine falls. People will buy more margarine and less butter at all prices of butter. See Part D of Figure 7.5 on page 183.

Complementary Goods

When two goods are complementary products, the decrease in the price of one will increase the demand for it as well as its complementary good. Cameras and film are complementary goods. Suppose the price of film remains the same. If the price of cameras drops, people will probably buy more of them. They will also probably buy more film to use with the cameras. Therefore, a decrease in the price of cameras leads to an increase in the demand for its complementary good, film. As a result, the demand curve for film will shift to the right as shown in Part E of Figure 7.5 on page 183.

The Price Elasticity of Demand

The law of demand is straightforward. The higher the price charged, the lower the quantity demanded—and vice versa. If you sold DVDs, how could you use this information? You know that if you lower prices, consumers will buy more DVDs. By how much should you lower the cost? However, you cannot really answer this question unless you know how responsive consumers will be to a decrease in the price of DVDs. Economists call this price responsiveness elasticity. The measure of the price elasticity of demand is how much consumers respond to a given change in price.

Elastic Demand

For some goods, a rise or fall in price greatly affects the amount people are willing to buy. The demand for these goods is considered elastic—consumers can be flexible when buying or not buying these items. For example, one particular brand of coffee probably has a very

Cooperative Learning

Organize the class into small groups. Ask group members to hold discussions on the point at which the real income effect becomes a significant deterrent to buying new items. Have group members then discuss how they use the substitution effect in their own purchases. Finally, have groups use the information developed during discussions to create a short report to business on the buying habits and economic decision making of young consumers. Suggest that groups use graphs, charts, and other appropriate visual materials to illustrate their booklets.

Visual Learning Activity

Understanding Shifts in the Demand Curve

Draw the following diagram on the board:

1. The demand curve for CDs if all wages increased by 20 percent. Demand curve shifts to the right.
2. The demand curve for the popular toy “Winnie Widget” after it is replaced by another fad. Demand curve shifts to the left.
3. The demand curve for margarine if the price of butter falls. Demand curve shifts to the left.

Interactive Economics

Interactive Topic Menu

Data on pages 177–184
Demand and Supply

Chapter 7

Disc 1, Side 1

ASK: How will an increase in the price of an inelastic good, such as prescription medicine, affect the quantity demanded? In general, most people will be willing to buy prescription medicine to stay healthy, regardless of the price. Quantity demanded for these medicines, therefore, will not significantly decrease if their prices rise.

Also available in VHS.

LESSON 3: DEMAND

Have students study the “Advanced Topics Menu,” which focuses on determinants of demand elasticity. After clicking on the information provided, students should list the underlying determinants of elasticity on note cards. Have students quiz each other with their cards.

Supplied in both CD-ROM and disk formats.
CHAPTER 7

PART A Change in Demand if Population Increases

<table>
<thead>
<tr>
<th>Price per TV</th>
<th>Quantity of TVs Demanded</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100</td>
<td>1,000</td>
</tr>
<tr>
<td>$200</td>
<td>2,000</td>
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<tr>
<td>$300</td>
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<tr>
<td>$400</td>
<td>4,000</td>
</tr>
<tr>
<td>$500</td>
<td>5,000</td>
</tr>
</tbody>
</table>

Part C Change in Demand if an Item Becomes a Fad

<table>
<thead>
<tr>
<th>Price of Complement Decreases</th>
</tr>
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<tbody>
<tr>
<td>$5.00</td>
</tr>
<tr>
<td>$6.00</td>
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<tr>
<td>$7.00</td>
</tr>
<tr>
<td>$8.00</td>
</tr>
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</table>

Part D Change in Demand for Complementary Goods

<table>
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<tr>
<th>Price of Substitute Decreases</th>
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</thead>
<tbody>
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</tr>
<tr>
<td>$2.00</td>
</tr>
<tr>
<td>$3.00</td>
</tr>
<tr>
<td>$4.00</td>
</tr>
</tbody>
</table>

Part B Change in Demand if Income Decreases

<table>
<thead>
<tr>
<th>Price per CD</th>
<th>Quantity of CDs Demanded</th>
</tr>
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Part E Change in Demand for Complementary Goods

<table>
<thead>
<tr>
<th>Price of Film Demanded</th>
<th>Quantity of Film Demanded</th>
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<tr>
<td>$2.00</td>
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<td>$3.00</td>
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<tr>
<td>$4.00</td>
<td>400</td>
</tr>
<tr>
<td>$5.00</td>
<td>500</td>
</tr>
</tbody>
</table>

CHAPTER 7

L2 Developing Visual Materials

Ask students to explore the effect of recycling on the demand for raw materials. Have them concentrate on recyclable materials, such as engine oil, metals, and wood pulp. Suggest they present their data in graphs and charts for use as examples in a class discussion.

Economic Connection to... Technology

Demand for ice-cold soft drinks is greater during hot weather than in the winter months. The management of the Coca-Cola Company thinks this rather obvious fact should be reflected in prices charged at vending machines, and they have developed technology to do just that. A computer chip in the vending machine responds to temperature sensors, and raises the price of soft drinks as the weather gets warmer. The company is locking at other ways to make vending-machine prices more reflective of demand. One idea is to link price to traffic at a machine. If few people buy from the machine, prices might drop automatically.

Cooperative Learning

Remind students that economists distinguish between needs and wants. Needs are relatively few, while wants are almost limitless. Organize students into small groups. Direct each group to select a good or service and then write a brief research report on how marketing and advertising may create demand for this good or product by clouding the distinction between needs and wants. Call on a volunteer from each group to present the group’s findings.

CHAPTER 7

SECTION 2, Pages 177–185

Relevant Issues in Economics

Highways Substitute for Railroads

In the 1950s, the federal government began construction of the interstate highway system. Partly because taxes helped support the development of highways, shipping goods by truck was less costly than by shipping by rail. As a result, the trucking industry grew, while railroads declined. Today, many nations have more efficient railroad systems than does the United States. Ask students to discuss the following: Should the federal government also have subsidized railroads in the 1950s? Why or why not?

Visual Instruction

FIGURE 7.5 Determinants of Demand

Changes in Demand Many factors can affect demand for a specific product. When demand changes, the entire demand curve shifts to the left or the right.

Part A Change in Demand if Population Increases

When population increases, opportunities to buy and sell increase. The demand curve labeled D1 represents demand for television sets before the population increased. The demand curve labeled D2 represents demand after the population increased.

Part B Change in Demand if Income Decreases

The demand curve labeled D1 represents CD demand before income decreased. The demand curve D2 represents CD demand after income decreased. If your income goes up, however, you may buy more CDs at all possible prices, which would shift the demand curve to the right.

Part C Change in Demand if an Item Becomes a Fad

When a product becomes a fad, more of it is demanded at all prices, and the entire demand curve shifts to the right. Notice how D1—representing demand for Beanie Babies™ before they became popular—becomes D2—demand after they became a fad.

Part D Change in Demand for Substitutes

As the price of the substitute (margarine) decreases, the demand for the item under study (butter) also decreases. It is, in contrast, the price of the substitute (margarine) increases, the demand for the item under study (butter) also increases.

Part E Change in Demand for Complementary Goods

A decrease in the price of cameras leads to an increase in the demand for film, its complementary good. As a result, the demand curve for film will shift to the right. The opposite would happen if the price of cameras increased, thereby decreasing the demand for the complementary good, film.

Direct students’ attention to Part A of Figure 7.5. Ask: What eventually would happen to the demand curve for toys if there were a decline in the birthrate? Why? The demand curve would move to the left, because there would be a decline in demand for toys at each and every price.

L2 Planning a Trip

Ask students to plan for a trip they would like to take, such as a boating or camping trip. In their preparation for the trip they should list all the goods they will need and the quantities in which they will need them. Have students make notations on their lists to indicate the elasticity of each item.

BLOCK SCHEDULING
Demand for soft drinks and 1-bone steak is elastic because substitutes for these products exist. Demand for salt and lightbulbs tends to be inelastic because the percentage of a person’s total budget devoted to the purchase of these goods is relatively small. At least three factors determine the price elasticity of demand for a particular item: the existence of substitutes, the percentage of a person’s total budget devoted to the purchase of that good; and the time consumers are given to adjust to a change in price.

The more substitutes that exist for a product, the more responsive consumers will be to a change in the price of that good. A diabetic needs insulin, which has virtually no substitutes. The price elasticity of demand for insulin, therefore, is very low—it is inelastic. The opposite is true for soft drinks. If the price of one goes up by very much, many consumers may switch to another. The percentage of your total budget spent on an item will also determine whether its demand is elastic or inelastic. For example, the portion of a family’s budget devoted to pepper is very small. Even if the price of pepper doubles, most people will keep buying about the same amount. The demand for pepper, then, is relatively inelastic. Housing demand, in contrast, is relatively elastic because it represents such a large proportion of a household’s yearly budget.

Finally, people take time to adjust to price changes. If the price of electricity goes up tomorrow, your demand will be inelastic. The longer the time allowed to reduce the amount of electricity you use, however, the greater the price elasticity of demand.

### Elastic Demand

Elastic demand: Consumers consider the many competing brands of coffee to be almost the same. A small rise in the price of one brand will probably cause many consumers to purchase the cheaper substitute brands.

### Inelastic Demand

Inelastic demand: If a price change does not result in a substantial change in the quantity demanded, that demand is considered inelastic—consumers are usually not flexible enough to purchase some of the item no matter what it costs. Salt, pepper, sugar, and certain types of medicine normally have inelastic demand. By using two demand curves in one diagram—as shown in Figure 7.6—you can compare a relatively inelastic demand with a relatively elastic demand.

#### What Determines Price Elasticity of Demand?

Why do some goods have elastic demand and others have inelastic demand?

1. **Elastic demand:** a situation in which a product’s price greatly affects the amount that people are willing to buy.

2. **Inelastic demand:** a situation in which a product’s price change has little impact on the quantity demanded by consumers.

3. **Elasticity of Demand:** Measures consumers’ responsiveness to an increase or decrease in price.

4. **Price Elasticity of Demand:** A product often used with another product; as the price of one product increases, the demand for the other decreases.

5. **Price Elasticity of Demand:** The rise or fall in a product’s price greatly affects the amount that people are willing to buy.

6. **Price Elasticity of Demand:** Measures consumers’ responsiveness to an increase or decrease in price.

7. **Price Elasticity of Demand:** A product often used with another product; as the price of one product increases, the demand for the other decreases.

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9. **Price Elasticity of Demand:** Measures consumers’ responsiveness to an increase or decrease in price.

10. **Price Elasticity of Demand:** A product often used with another product; as the price of one product increases, the demand for the other decreases.

### Analysis Questions

1. **Define demand schedule, demand curve, complementary goods, price elasticity of demand, elastic demand, inelastic demand.**

2. **What does a demand curve show?**

3. **Graphic Organizer:** Create a diagram like the one below to show the determinants of demand.

4. **How does the elasticity of demand affect the price for a given product?**

5. **Demand Elasticity:** Provide an example of two products or services for which you have elastic demand and inelastic demand. Explain your choices.

6. **Making Comparisons:** Write a paragraph describing how demand and quantity demanded are similar, and how they are different. Use the examples you provided in question 5 to help make the comparison in your paragraph.

7. **Critical Thinking Activity:**

### Critical Thinking Activity

Classifying Have students work in pairs to compile a list of substitutes for the following items: wallpaper, grapefruit, belt, cheese set, carpet. (Possible answers: paint, orange, suspenders, checkers, tile) Then have students list complementary goods for each of the following items: Ping-Pong table, pool table, cup, bed, tennis shoes. (Possible answers: Ping-Pong balls, tropical fish, saucer, pillows, shoeslaces).
The Law of Supply and the Supply Curve

The Incentive of Greater Profits

The profit incentive is one of the factors that motivates people in a market economy. In the case of supply, the higher the price of a good, the greater the incentive is for a producer to produce more. The higher price not only returns higher profits, but it also must cover additional costs of producing more.

Suppose you own a company that produces and sells skateboards. Figure 7.7 shows some of your costs of production. Imagine that the price you charge for your skateboards covers all of these costs and gives you a small profit. Under what circumstances would you be willing to produce more skateboards?

To take on the expense of expanding production, you would have to be able to charge a higher price for your skateboards. At a higher price per skateboard, you would be willing to supply—that is, the quantity supplied, the amount of a good or service that a producer is willing and able to supply at a specific price.

The quantity supplied, the amount of a good or service that a producer is willing and able to supply at a specific price.
The Supply Curve

As with the law of demand, special tables and graphs can show the law of supply. Using the example of CD producers, we show a visual relationship between the price and the quantity supplied in Figure 7.8.

Part A is the supply schedule, or table, showing that as the price per CD increases, the quantity supplied increases. Part B of

Figure 7.8 is a graph plotting the price and quantity supplied pairs from the supply schedule. Note that the bottom axis shows the quantity supplied. The side axis shows the price per CD. Each intersection of price and quantity supplied represents a point on the graph. We label these points L through V.

When we connect the points from Part B with a line, we end up with the supply curve, as shown in Part C. A supply curve shows the quantities supplied at each possible price. It slopes upward from left to right. You can see that the relationship between price and quantity supplied is direct—or moving in the same direction.

Quantity Supplied vs. Supply

Each point on a supply curve signifies that a producer will supply a certain quantity at each particular price. If the price rises, the quantity supplied increases. As price rises, the quantity supplied increases. This fact is the basis of the law of supply.

L2 Explaining Ideas Ask students to explain what would happen to the supply for high-performance tires in the following situations:

1. The cost of rubber—an important raw material used in the making of tires—increases. Supply decreases because the cost of inputs has increased.

2. Several new businesses enter the high-performance tire market. Supply increases because as more and larger firms enter an industry, greater quantities of the product are supplied at each and every price.

3. Government imposes a tax on automobile parts—including tires. Supply decreases because taxes cause the cost of production to rise.

4. New technology increases efficiency in the tire-making process. Supply increases because increased efficiency means lower production costs.

Organize students into groups of four and give each group a sheet of paper with an enlarged version of the following concept map on it.

Cooperative Learning

Have a group member write “Determinants of Supply” in the central oval. Next, have that same group member enter one of the determinants of supply in an outer oval. Then have group members pass the paper around, with each one adding another determinant of supply. Have groups repeat the process, with each member adding an example of a determinant of supply to the appropriate outer oval.

Cooperative Learning

Have students click on “Supply Schedules and Curves.” Then have students write a paragraph explaining why the concept of supply involves a direct relationship rather than an inverse relationship between prices and quantity.

Supplied in both CD-ROM and disk formats.
or decreases, the quantity supplied also increases or decreases. A change in quantity supplied is caused by a change in price and is shown as a movement along the supply curve.

Sometimes, however, producers will supply more goods or fewer goods at every possible price. This is shown as a movement of the entire supply curve and is known as a change in supply. A change in price does not cause this movement. What does cause the entire supply curve to shift to the right (increase in supply) or the left (decrease in supply)?

**The Determinants of Supply**

Four of the major determinants of supply (not quantity supplied) are the price of inputs, the number of firms in the industry, taxes, and technology.

**Price of Inputs**

If the price of inputs—raw materials, wages, and so on—drops, a producer can supply more at a lower production cost. This causes the supply curve to shift to the right. This situation occurred, for example, when the price of memory chips fell during the 1980s and 1990s. More computers were supplied at any given price than before. See Part A of Figure 7.8. In contrast, if the cost of inputs increases, suppliers will offer fewer goods for sale at every possible price.

**Number of Firms in the Industry**

As more firms enter an industry, greater quantities are supplied at every price, and the supply curve shifts to the right. Consider the number of video rentals. As more video rental stores pop up, the supply curve for video rentals shifts to the right. See Part B of Figure 7.8.

**Taxes**

If the government imposes more taxes, businesses will not be willing to supply as much as before because the cost of production will rise. The supply curve for products will shift to the left, indicating a decrease in supply. For example, if taxes on silk increased, silk businesses would sell fewer quantities at each and every price. The supply curve would shift to the left, as shown in Part C of Figure 7.8.

**Technology**

The use of science to develop new products and new methods for producing and distributing goods and services is called technology. Any improvement in technology will increase supply, as shown in Part D. Why? New technology usually reduces the cost of production. See Figure 7.10 on page 192.

**Extending the Content**

**Productivity**

The productivity of the factors of production also can have an impact on the supply of goods and services. For example, a motivated, well-trained workforce will tend to be more productive. This would mean that more goods and services would be produced more efficiently. And this, in turn, would increase the supply of goods and services in the market. On the other hand, an unmotivated and poorly trained workforce would be less productive, causing a decrease in supply.

**Visual Learning Activity**

**Understanding Shifts in the Supply Curve**

Reproduce the following diagram and distribute copies to students. On each diagram, have students draw arrows—indicating the direction of movement of the supply curve—and the supply curve for each of the following:

1. The supply curve for CDs if the price for raw materials used in making CDs falls.
2. The supply curve for the “Winnie Widget” toy after its producers introduce a new assembly-line system.
3. The supply curve for CDs after the government cuts taxes on sales of CDs. In all cases, supply curve shifts to the right.

**Assess**

Meeting Lesson Objectives

Assign Section 3 Assessment as homework or an in-class activity.

*Use Interactive Tutor Self-Assessment Software to review Section 3.*
The Law of Diminishing Returns

You want to expand production. Assume you have 10 machines and employ 10 workers. You hire an eleventh worker. CD production increases by 1,000 per week. When you hire the twelfth worker, CD production might increase by only 900 per week. There are not enough machines to go around, and perhaps workers are getting in each other’s way. This example illustrates the law of diminishing returns.

According to this law, adding units of one factor of production to all the other factors of production increases total output. After a certain point, however, the extra output for each additional unit hired will begin to decrease.

### Critical Thinking Activity

1. Define law of supply, quantity supplied, supply schedule, supply curve, technology, law of diminishing returns.

2. What does the law of supply state?

3. How does the incentive of greater profits affect supply?

4. What is a supply schedule and a supply curve showing?

5. Graphical Organizer: Create a diagram like the one in the next column to explain the four determinants of supply.

6. Costs of production may include: price of machines to make baseball caps, price of materials used in baseball caps, price of packaging materials, price of transportation to distribute baseball caps, rental payments for offices and factories, advertising costs, employee wages, taxes, insurance.

7. Graph will vary.

### Understanding Cause and Effect

Understanding cause and effect involves considering why an event occurred. A cause is the action or situation that produces an event. What happens as a result of a cause is an effect.

### Learning the Skill

To identify cause-and-effect relationships, follow the steps listed on the left.

### Practicing the Skill

The classic cause-and-effect relationship in economics is between price and quantity demanded/quantity supplied. As the price for a good rises, the quantity demanded goes down and the quantity supplied rises.

1. Look at Figure A. What caused the big sale? What is the effect on consumers?

2. Look at the demand curve for DVD systems in Figure B. If the price is $5,000, how many will be demanded per year? If the price drops to $1,000, how many will be demanded per year?

### Application Activity

In your local newspaper, read an article describing a current event. Determine at least one cause and one effect of that event.
**SECTION 4, Pages 194–199**

**SECTION 4**

**Putting Supply and Demand Together**

**Cover Story**

Time, November 30, 1988

Your kid won’t stop begging for a Furby, right? … And you’ve driven to every mall in the state and still can’t find it. Your next-door neighbor traded his car for a dozen on a black-market website, but he’s hoarding them until just before Christmas, prime time for scalping. You’re stuck with a K Mart waiting list and cheerful lies from salespeople: ‘‘We’ll call you soon.’’ Makes you wanna gouge those adorable Furry eyes right out of their electronic sockets.

What do Furbys™, Beanie Babies™, Tickle Me Elmo™, and Cabbage Patch Kids™ all have in common? At one point in time, they all were in short supply—and usually right before the Christmas holiday season. As you will read, shortages occur when the quantity demanded is larger than the quantity supplied at the current price.

**Equilibrium Price**

In the real world, demand and supply operate together. At the price of a good goes down, the quantity demanded rises and the quantity supplied falls. As the price goes up, the quantity demanded falls and the quantity supplied rises.

Is there a price at which the quantity demanded and the quantity supplied meet? Yes. This level is called the equilibrium price. At this price, the quantity supplied by sellers is the same as the quantity demanded by buyers. One way to visualize equilibrium price is to put supply and demand curves on one graph, as shown in Figure 7.11. Where the two curves intersect is the equilibrium price. At that price, shown in the graph above, the quantity of CDs that consumers are willing and able to purchase is 600 million per year. And suppliers are willing to supply exactly that same amount.

**Shifts in Equilibrium Price**

What happens when there is an increase in the demand for CDs? Assume that scientists prove that listening to more music increases life span. This discovery will cause the entire demand curve to shift outward to the right, as shown in Figure 7.12 on page 196.

What about changes in supply? You can show these in a similar fashion. Assume that there is a major breakthrough in the technology of producing CDs. The supply curve shifts outward to the right. The new equilibrium price will fall, and both the quantity supplied and the quantity demanded will increase.

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**Reading Objectives**

1. How is the equilibrium price determined?
2. How do shifts in equilibrium price occur?
3. How do shortages and surpluses affect price?
4. How do price ceilings and price floors restrict the free exchange of prices?

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**SECTION 4 RESOURCE MANAGER**

**Multimedia**
- Daily Focus Transparency 14
- Economic Concepts Transparency 8
- Vocabulary PuzzleMaker
- Interactive Tutor Self-Assessment Software
- ExamView® Pro Testmaker
- MindJogger Videoquiz
- NBF’s Economics & You
- Interactive Economics!

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**Meeting Special Needs**

**Speech Disabilities** Have students research to find historic examples of how shortages put pressure on prices to rise. Then have them deliver short speeches about their findings. Students with speech disabilities may want to develop their speeches as a written assignment or have a classmate deliver the speeches they write. Encourage speechwriters to direct their presenters so that their speeches are delivered in the way they wish them to be heard.

Refer to Inclusion for the Social Studies Classroom Strategies and Activities for students with different learning styles.
Prices Serve as Signals

In the United States and other countries with mainly free-enterprise systems, prices serve as signals to producers and consumers. Rising prices signal producers to produce more and consumers to purchase less. Falling prices signal producers to produce less and consumers to purchase more.

Shortages

A shortage occurs when, at the current price, the quantity demanded is greater than the quantity supplied. If the market is left alone—without government regulations or other restrictions—shortages put pressure on prices to rise. At a higher price, consumers reduce their purchases, whereas suppliers increase the quantity they supply.

Surpluses

At prices above the equilibrium price, suppliers produce more than consumers want to purchase in the marketplace. Suppliers end up with surpluses—large inventories of goods—and this and other forces put pressure on the price to drop to the equilibrium price. If the price falls, suppliers have less incentive to supply as much as before, whereas consumers begin to purchase a greater quantity. The decrease in price toward the equilibrium price, therefore, eliminates the surplus.
SECTION 4, Pages 194-199

INTERACTIVE ECONOMICS

LESSON 5: PRICE DETERMINATION

Have students click on “Prices as Signals.” Then have them quiz a partner on the way prices act as signals to consumers and producers.

Section Quiz 7–4

Assign Section 4 Assessment as homework or an in-class activity.

Use Interactive Tutor Self-Assessment Software to review

3 Assess Meeting Lesson Objectives

Assign Section 4 Assessment as homework or an in-class activity.

Use Interactive Tutor Self-Assessment Software to review

4 Close Have students write a paragraph explaining how equilibrium price is attained

Reading Essentials and Study Guide 7–4

Have students create a visual representation that illustrates equilibrium. You might suggest a set of scales in balance—with “supply” written in one scale and “demand” written in the other—as an example.

CHAPTER 7

SECTION 4

Price Floors A price floor, in contrast, is a government-set minimum price that can be charged for goods and services. Price floors—more common than price ceilings—prevent prices from dropping too low. When are low prices a problem? Assume that about 30 of your classmates all want jobs after school. The local fast-food restaurant can hire 50 students at $4.15 an hour, but the government has set a minimum wage—a price floor—of $5.15 an hour. Some of you will get hired, and you’ll happily earn $5.15 an hour. Not all of you will get hired at that wage, however, which leads to a surplus of unemployed workers as shown in Part B of Figure 7.13. If the market were left on its own, the equilibrium price of $4.15 per hour would have all of you employed.

Besides affecting the minimum wage, price floors have been used to support agricultural prices. If the nation’s farmers have a bumper crop of wheat, for example, the country has a huge surplus of wheat. The market, if left alone, would take care of the surplus by having the price drop. As prices decrease, remember, quantity supplied decreases and quantity demanded increases. But the nation’s farmers might not earn enough to make a profit or even pay their bills if the price drops too much. So the government sometimes sets a price floor for wheat, which stops the price per bushel from dropping below a certain level. The farmers know this, so instead of reducing their acreage of wheat—which would reduce the surplus—they keep producing more wheat.

Critical Thinking Activity

   • The first graph should show an equilibrium price for sunglasses.
   • The second graph should show the shift that would occur if consumers increased their willingness to pay for sunglasses.
   • The third graph should show the shift that would occur if consumers decreased their willingness to pay for sunglasses.

For help in using Figure 7.14, see page xv in the Economic Workbook, Level 2.

PRACTICE AND ASSESS KEY SKILLS WITH INTERACTIVE TUTOR SELF-ASSESSMENT SOFTWARE TO REVIEW

Answer: Because price ceilings prevent prices from going too high, producers do not want to supply large amounts of goods or services on which they can gain few profits. A reduced supply leads to a shortage.

Reteach Have students use the Terms to Know a paragraph explaining how equilibrium price is attained.

SECTION 4

Understanding Key Terms

1. Define equilibrium price, shortage, surplus, price ceiling, rationing, black market, price floor.

Critical Thinking Activity

   • The first graph should show an equilibrium price for sunglasses.
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   • The third graph should show the shift that would occur if consumers decreased their willingness to pay for sunglasses.

For help in using Figure 7.14, see page xv in the Economic Workbook, Level 2.
Background
Alfred Marshall was the most influential economist of his time. In developing the theory of supply and demand, he reconciled classical economists, who believed that production controlled price and contemporary economists, who claimed that demand set prices. Marshall believed that free competition and private enterprise would lead to better social conditions and full employment.

Teach
Have volunteers read aloud paragraphs of the quoted excerpts from Marshall’s Elements of Economics. Then have students paraphrase the paragraphs by writing a topic sentence for each. Finally, direct students to answer the questions in Checking for Understanding. You might have students read additional chapters in Elements of Economics and report on Marshall’s theory of wage economics.

Alfred Marshall
ECONOMIST (1842–1924)

Alfred Marshall is known for introducing the concept of supply and demand analysis to economics. The following excerpt from Elements of Economics explains the concept of equilibrium.

“The simplest case of balance, or equilibrium, between desire and effort is found when a person satisfies one of his wants by his own direct work. When a boy picks blackberries for his own eating, the action of picking may itself be pleasurable for a while... Equilibrium is reached, when at last his eagerness to play and his disinclination for the work of picking counterbalance the desire for eating. The satisfaction which he can get from picking fruit has arrived at its maximum...”

Marshall also explained how equilibrium is established in a local market. Buyers and sellers, having perfect knowledge of the market, freely compete for their own best interest. So in doing they arrive at a price that exactly equates supply and demand.

“A price may be called the true equilibrium price: because if it were fixed on at the beginning and adhered to throughout, it would exactly equate demand and supply. (i.e. the amount which buyers were willing to purchase at that price would be just equal to that for which sellers were willing to take that price)...

In our typical market then we assume that the forces of demand and supply have free play, that there is no combination among dealers on either side, but each acts for himself, and there is much free competition; that is, buyers generally compete freely with buyers, and sellers compete freely with sellers.”

Checking for Understanding
1. What does Marshall mean by “equilibrium between desire and effort”?
2. What is an equilibrium price?

Answers to Checking for Understanding
1. Answers will vary but should indicate the point at which satisfaction created by effort has arrived at its maximum. Students should note that at this point, additional effort takes away from the pleasure of attaining the desire.
2. An equilibrium price is a price that is fixed at the beginning and adhered to throughout marketing. It equates supply and demand.

Economics Journal
Voluntary Exchange In American retail stores, consumers may either accept the posted price or decide to shop for a better price elsewhere. However, in certain markets—used cars for example—buyer and seller usually must agree on the price. Have students keep journal entries of the various advertised prices of a few selected makes and model years of used cars over a period of two weeks. Ask students to write a few lines in answer to the following: What risks do buyer and seller each assume when the buyer must “make an offer”?
There is a shortage.
1. Answers will vary.
2. Demand for CDs, a luxury, is elastic.
3. Prediction will vary.

There is a surplus.
1. Answers will vary.
2. Demand for insulin, a necessity for diabetics, what would you state?

Elastic demand means consumers are more responsive to price changes. Inelastic means they are less responsive.
1. Voluntary exchange
2. Quantity demanded falls
3. Real income effect; substitution effect
4. The demand curve moves to the right.
5. Elastic demand means consumers are more responsive to price changes. Inelastic means they are less responsive.
6. Demand curves shift to the right.
7. More, to take advantage of increased profits
8. Supply curve would shift to the left.
9. There is a surplus
10. There is a shortage.

Thinking Critically
1. Making Generalizations
2. Making Comparisons
3. Predictions will vary.

Applying Economic Concepts
Supply and Demand
Some prices change in our economy very seldom, whereas others change all the time, even daily. Make a list of products whose prices change slowly, if at all. Make another list of products whose prices you think change quickly.

Cooperative Learning Project
Working in groups of four, each group will interview a local merchant. Ask the following questions and others you think are relevant. What determines the prices you charge? What determines when you change prices? Are there any costs to you of changing prices (such as reprinting price lists)? Using a computer, write a supply and demand summary for the interview. Then compare these summaries.

Analyzing the Global Economy
Clip articles from newspapers or magazines that show the laws of supply and/or demand operating in other parts of the world. Possibilities would be weather damage to crops and economic conditions affecting housing starts, and so on.

ASK: In the American economy, what forces other than supply and demand help to set prices? Government regulations, such as price ceilings and floors.
1 Focus

Tell students that the Middle East contains more than half of the world’s known oil reserves. (In contrast, the United States has only 2 percent of the world’s supplies.) However, the region accounts for only about one-third of the world’s oil production. This is because the Organization of Petroleum Exporting Countries (OPEC)—the oil cartel—exercises considerable control over production in the region.

2 Teach

Direct students to study the map annotations and to note the sources of the oil consumed in the United States. Then discuss the significance of U.S. dependence on foreign oil. Ask: What events could obstruct the flow of foreign oil to the United States? How would that affect the American economy? Students may suggest that political unrest, wars, terrorism, and changing trade relations all might interrupt the flow of imported oil. This could disrupt activity in the United States economy, because nearly half of the country’s oil consumption is met by foreign sources.

3 Assess

Have students answer the Thinking Globally questions.

4 Close

Have students assume that they are experts assigned to study the United States’s dependence on foreign oil. Ask them what recommendations they might make to the government to protect the country from oil shortages due to a disruption of the flow of foreign oil.

Teacher’s Notes

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<tr>
<th>Question</th>
<th>Answer</th>
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<tr>
<td>1. Which region of the world is the largest source for American oil imports?</td>
<td>South America</td>
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<tr>
<td>2. What percentage of American oil imports do Canada and Mexico provide?</td>
<td>24 percent</td>
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