Savings Accounts

Chapter Objectives

After completing this chapter, you will be able to:

- **Section 30.1** Savings Account Basics
 - **Discuss** the three reasons people save money.
 - **Describe** compound interest.
- Section 30.2 Types of Savings Accounts
 - **Differentiate** a regular savings account from a CD, a money market fund, and a money market deposit account.
 - Explain two advantages and two disadvantages of savings accounts.

Ask

STANDARD &POOR'S

Savings Accounts

- **Q:** Which is best, passbook accounts, money markets, or CDs?
- A: A basic savings account is sometimes referred to as a passbook account, since many banks provide account holders with little books used for keeping track of activity. The main advantage of a basic savings account is its accessibility—the money is pretty much there whenever you need it, and you're free to add or subtract at will. They can be opened with relatively little money, but of course, the disadvantage is that these accounts typically provide a comparably low rate of return. A money market account can be thought of as a restricted savings account since you're only allowed so many withdrawals per month. In addition, they tend to require a higher balance than a basic savings account. However, you will be rewarded with a higher interest rate. Finally, CDs, or certificates of deposit, usually provide investors with more favorable interest rates than most savings accounts and money markets. The downside is that your money would be locked away for a specific amount of time, anywhere from six months to a number of years.

Mathematics Patrick plans to open a savings account. He prefers a passbook account, but the interest rate of the money market account is 1.78% higher. How much more will he make if he puts \$5,000 into a money market account?

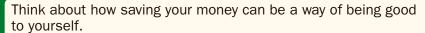
CONCEPT Percents Less Than One Percents less than 1 represent values less than $\frac{1}{100}$. In other words, 0.1% is one-tenth of 1 percent, which can also be represented in decimal form as 0.001 or in fraction form as $\frac{1}{1000}$.



Savings Account Basics

Reading Guide

Before You Read



Read to Learn

- Discuss the three reasons people save money.
- · Describe compound interest.

The Main Idea

Money put aside for future use is called savings. Generally people use their savings for major purchases, emergencies, and retirement income. Savings accounts can earn either simple or compound interest. If one leaves money saved in an account that accumulates compound interest, interest is earned on both the amount saved and the interest earned.

Key Concepts

- A Guide to Saving
- Earning Interest on Savings

Vocabulary

Key Terms

savings rate of return compound interest

Academic Vocabulary

You will find these words in your reading and on your tests. Make sure you know their meanings.

experts item suggest accumulate

Graphic Organizer

In a figure like the one below, list the reasons people need to save money in the left column. In the right column, give examples of reasons you will want to save in your own life.

Reasons People Save	Reasons I Should Save
1.	
2.	
3.	



Go to the *Introduction to Business* Online Learning Center through **glencoe.com** for a printable graphic organizer.

Academic Standards

English Language Arts

NCTE 1 Read texts to acquire new information

NCTE 9 Develop an understanding of diversity in language use across cultures

Mathematics

Number and Operations Compute fluently and make reasonable estimates

A Guide to Saving

To achieve your financial goals, you will need a plan. Saving is putting money aside for future use. The money you save is called your **savings**. Savings plans include regular savings accounts, certificates of deposit, and money market funds.

The amount of money you save depends on how much of your income you are willing not to spend. Some personal finance **experts** say people should try to save about 10 percent of their take-home income. Many experts **suggest** that the amount to be saved should be taken from income as soon as it is received so that the saver is not tempted to spend it. However you save, it should be a part of your budget.

All savings involve some sacrifice. When you save money, you are putting off spending that money on an **item** that you might want right now. This sacrifice is called the *opportunity cost* of saving. The opportunity cost of a decision is the same as the benefit of the choice that is given up when one decision is made instead of another.

Saving is a way of being good to yourself. It helps to ensure that you will have money when you need it. People set up and maintain a savings plan for three reasons: to make major purchases, to provide for emergencies, and to have income for retirement.



Identify What are the three major reasons for setting up and maintaining savings plans?

International Business

Guarding Savings Security

Swiss banks have a reputation for providing customers with a secure and discreet banking environment. Accounts at banks such as Credit Suisse and UBS can be accessed worldwide. The Swiss Federal Banking Commission works to enhance this reputation by licensing banks and supervising their activities. This organization can act to protect the financial interests of account holders. The security of deposits is often a crucial feature to customers because of the important role savings accounts play in helping individuals to provide for emergencies.

Examples of Languages Across Cultures

Q: In French, how do you say: "May I have the check, please."

A: L'addition, s'il vous plait. (pronounced: Lă-ă-dēe-sēe-on sēel voo plā)

Why is the security of money deposited one of the most important issues for account holders?

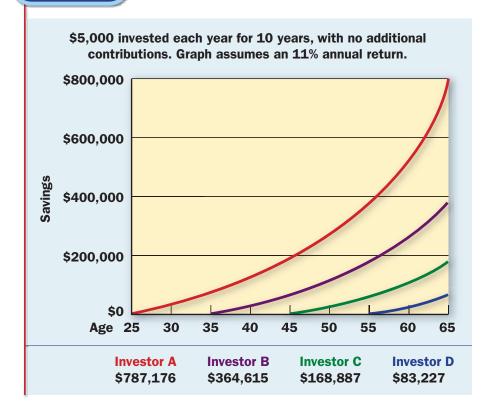
As You Read

Think about whether waiting for something you want is worth giving up something else that you want.

Saving for Retirement

Three things can have a sizable impact on your retirement fund: (1) how much you invest, (2) the rate of return you earn on your investments, and (3) the number of years those investments have to grow. What does this chart tell you?

Figure 30.1 – The Value of Starting Early



Making Major Purchases

Most people need to save money before they can make major purchases. Common reasons people save money are to buy a home or to pay for a college education. You might also decide to save money because you want to purchase a less expensive item, such as a good sound system, a top-of-the-line guitar, or a car.

Providing for Emergencies

You might face financial emergencies in your life. Your car could break down, you could lose your job, or you could develop a health problem. Saving your money can help you deal with the financial burden that an emergency can create. Experts recommend that people set aside at least six months of income in case of an emergency.

As You Read

Think about saving for retirement. How much do you think you will need to retire someday?

Planning for Retirement

It might seem too early to think about saving for retirement, but it is best to begin early. **Figure 30.1** illustrates the average retirement account balances for people who start saving at different ages. Most U.S. workers receive Social Security income when they retire. Many people have some type of retirement plan where they work, which will provide additional income. Business owners may also set up retirement plans.

For most people, though, Social Security and retirement plans do not provide enough money to retire comfortably. They must rely on their savings. If you start early in your life, you can **accumulate** a sizable nest egg. For example, suppose you want to retire in 35 years. If you start putting away \$100 per month in an account with a return of 6 percent, by the time you retire, you will have saved about \$143,000. You will have put in \$42,000 and earned \$101,000 in interest.

Earning Interest on Savings

Not all savings earn income. If you put your savings into a jar, a piggy bank, or under a mattress, no income is earned. To earn income on savings, you must store it in a place that will provide you with interest, such as a bank or savings and loan association. The money you put into a savings account earns interest.

If you put money into a bank's savings account, you are actually lending the bank your money. In this case, *you* are the creditor with the same conditions for lending as other creditors. The bank uses your savings to make loans to other people. Part of the interest the bank receives is used to pay interest to you.



Fiscal Fitness for Teens

Teach them that a paycheck is more than a chance to play big spender at the mall. It's an opportunity to bank on a cushier future.

From Standard & Poor's weekly investing newsletter, "The Outlook"

With school out, many teenagers will begin collecting their first paychecks. Now is the time for parents and grandparents to initiate a dialogue about the importance of saving as well as the value of planning and investing to meet objectives.

Start by asking your working teen plenty of goal-oriented questions, suggests David Braverman, vice president for portfolio services at Standard & Poor's and also a father of four, ages 13 to 21. Adults "may not want to see their kids spend money on short-term goals such as clothes and music, and may not realize that, to a teen, a long-range goal is a car,"

Braverman says, adding that adults should use their own wisdom to help kids strike that balance between short- and long-term goals.



CASE STUDY Go to the *Introduction to*Business Online Learning Center through
glencoe.com for the BusinessWeek Reader
Case Study.

Active Learning

Certificates of deposit can be a good way to achieve your long-term savings goals, but there is usually a penalty if you want to withdraw the money early. Research different CD accounts and compare penalties. Write an e-mail that gives advice to a teen about the connection between the rates on CDs and how long you must leave the money untouched.



The Rule of 72

Compound interest is usually earned daily, monthly, quarterly, or annually. The more often interest is compounded, the more you earn. The Rule of 72 is a rule used to calculate how long it will take to double the money in an investment. It is calculated by dividing 72 by the annual interest rate to get the number of years. For example, if you leave money in a savings account and let interest compound at 6%, you can double your savings in 12 years. Why might knowing the Rule of 72 be useful?

Saving is important to the economy because it generates loan money for people and businesses. Consumers use loans to buy houses and cars. Companies use loans to update their facilities and equipment. New equipment and buildings for business can enable a company to produce more goods and services. This often means that the company will need to hire more workers, which leads to economic growth.

Rate of Return

Earnings on savings can be measured by the rate of return, or yield. The **rate of return** is the percentage of increase in the value of your savings from earned interest.

Compounding

Simple interest is interest earned only on money deposited into a savings account, called the principal. When principal and interest are left in an account, it earns compound interest.

Compound interest is interest earned on both the principal and any interest earned on the principal. Compounding may take place every year, every quarter, every month, or even every day. For example, suppose you had \$50,000 in a savings account at 6 percent annual interest. After one year, you would earn \$3,000 in interest. With compound interest, the \$3,000 would be added to the \$50,000 and you would start earning interest on \$53,000. After 15 years you would earn almost \$70,000, or about \$20,000 more than your initial deposit.

Section 30.1

After You Read

Review Key Concepts

- 1. Name three savings plans.
- 2. List the three main reasons people save money.
- **3.** How is interest compounded?

Academic Skills

4. Mathematics Kim put the \$75 she earned from babysitting on New Year's Eve into a regular savings account last year. She earned \$3 in interest. What was Kim's rate of return?

rate of return, divide the total interest by the amount of her deposit.



For math help, go to the Math Appendix.



Go to the *Introduction to Business* Online Learning Center through **glencoe.com** to check your answers.

Types of Savings Accounts

Reading Guide

Before You Read



Read to Learn

- Differentiate a regular savings account from a CD, a money market fund, and a money market deposit account.
- Explain two advantages and two disadvantages of saving accounts.

The Main Idea

There are several types of savings accounts—common ones being the traditional savings account, the certificate of deposit (CD), money market fund, and money market deposit account. Each type of savings account has advantages and disadvantages.

Key Concepts

- Choosing a Savings Account
- Advantages and Disadvantages of Savings Accounts



Go to the *Introduction to Business* Online Learning Center through **glencoe.com** for a printable graphic organizer.

Vocabulary

Key Terms

regular savings accounts certificate of deposit (CD) maturity date money market fund money market deposit accounts liquidity inflation risk

Academic Vocabulary

You will find these words in your reading and on your tests. Make sure you know their meanings.

institution duration set mutual

Graphic Organizer

In a figure like the one below, write notes about each type of account.

Type of Savings Account	Notes		
Regular Savings Account			
Certificate of Deposit			
Money Market Fund			
Money Market Deposit Account			

Academic Standards

English Language Arts

NCTE 6 Apply knowledge of language structure and conventions to discuss texts

NCTE 11 Participate as members of literacy communities

Science

Content Standard F Students should develop understanding of science and technology in local, national, and global challenges

Choosing a Savings Account

Banks, savings and loans, savings banks, credit unions, and brokerage firms all offer several types of savings accounts. The three basic types are regular savings accounts, certificates of deposit, and money market funds. Figure 30.2 offers a look at interest compounded in savings accounts.

✓ Reading Check

Identify What are the three basic types of savings

🕽 As You Read

Think about putting your savings in a bank account or keeping it at home. Which would you prefer?

Regular Savings Accounts

Banks, savings and loans, savings banks, and credit unions all offer regular savings accounts. Traditionally called passbook accounts, regular savings accounts allow consumers to deposit or withdraw money at any time and to earn interest on the funds. Generally, a low minimum deposit, such as \$100, is required to open a regular savings account. The interest rate varies from one financial institution to another. The rate can also change over time at the same institution. With a savings account, you can withdraw money without any penalty. However, the interest rate is usually low. Many banks also charge a service fee if the savings account falls below a certain minimum balance.

Figure 30.2 — The Power of Compound Interest

Simple Interest			Compound Interest			
Year	Principal	6% Interest Earned	Interest Total	Principal	6% Interest Earned	Interest Total
1	\$50,000	\$3,000	\$3,000	\$50,000.00	\$3,000.00	\$3,000.00
2	\$50,000	\$3,000	\$6,000	\$53,000.00	\$3,180.00	\$6,180.00
3	\$50,000	\$3,000	\$9,000	\$56,180.00	\$3,370.80	\$9,550.80
4	\$50,000	\$3,000	\$12,000	\$59,550.80	\$3,573.05	\$13,123.85
5	\$50,000	\$3,000	\$15,000	\$63,123.85	\$3,787.43	\$16,911.28
6	\$50,000	\$3,000	\$18,000	\$66,911.28	\$4,014.68	\$20,925.96
7	\$50,000	\$3,000	\$21,000	\$70,925.96	\$4,255.55	\$25,181.51
8	\$50,000	\$3,000	\$24,000	\$75,181.51	\$4,510.89	\$29,692.40
9	\$50,000	\$3,000	\$27,000	\$79,692.40	\$4,781.55	\$34,473.95
10	\$50,000	\$3,000	\$30,000	\$84,473.95	\$5,068.43	\$39,542.38
11	\$50,000	\$3,000	\$33,000	\$89,542.38	\$5,372.55	\$44,914.93
12	\$50,000	\$3,000	\$36,000	\$94,914.93	\$5,694.89	\$50,609.82
13	\$50,000	\$3,000	\$39,000	\$100,609.82	\$6,036.59	\$56,646.41
14	\$50,000	\$3,000	\$42,000	\$106,646.41	\$6,398.79	\$63,045.20
15	\$50,000	\$3,000	\$45,000	\$113,045.20	\$6,782.71	\$69,827.91
Total Interest Earned: \$45,000			Total Interest Earned: \$69,827.91			

Interest on Interest Compound interest makes your money grow faster when interest is left to accrue. Which account earned more interest? What is the difference in the account totals after 15 years?



New Construction
Businesses that build new buildings usually do so with borrowed money. What is the relationship between savings and loans?

Certificates of Deposit

Another type of savings account, called a **certificate of deposit** (CD), requires you to deposit a specified amount of money in an account for a **set** period of time. The length of time might be three months, one year, or five years. A CD has a **maturity date**, which is when the money becomes available to you. The interest rate on a CD is higher than that on a regular savings account, but a CD's interest rate does not change over the **duration** of the CD term. If you cash in the CD before the maturity date, however, you will lose interest and might have to pay a penalty.

Money Market Funds

Brokerage firms, which buy and sell stocks and bonds, offer a special type of savings account called a money market fund. A money market fund is a kind of mutual fund, or pool of money, put into a variety of short-term debt (loans of less than one year) by business and government. In a way, you are lending your money to a business or the government to invest. The interest rate on a money market fund varies from month to month. An advantage is that you can withdraw your money at any time. You can also write checks on the account. There are, however, two disadvantages. Money market funds usually require high balances. Also, account holders can write only a limited number of checks.

Money Market Deposit Accounts Banks, savings and loans, and credit unions have their own form of money market fund called money market deposit accounts. They have the same basic requirements and characteristics of a money market fund. One difference is that the federal government generally insures the money in a money market deposit account.



Compare How does a money market deposit account differ from a money market fund?



how or where you save your money, you must find ways to find the money you want to save. Write down your savings every time you decide not to buy something. Putting every penny you find or dollar you have saved into the bank will add up. How do you think tracking every bit of your savings can help you save?

Science / TechTRENDS

Nanotechnology

Nanotechnology is a branch of science that focuses on the behavior of matter on a very small scale. In fact, a single nanometer is only about 10 atoms wide. Scientists hope to develop nanotechnology as the next great advancement in saving data. They predict that nanotechnology will allow for storage devices with more capacity and much faster response times than are available with current digital technologies. Storage devices engineered at the scale of nanometers could, for example, allow an entire movie to be downloaded to a transportable device that is smaller than a dime.



Go to the *Introduction to Business* Online Learning Center through **glencoe.com** for links to Web sites where you can learn more about nanotechnology. Write a paragraph about applications of it.

Advantages and Disadvantages of Savings Accounts

Besides earning interest, savings accounts offer other advantages. However, they also have disadvantages.

Insurance Against Loss

Banks, savings and loans, and credit unions are all insured. The Federal Deposit Insurance Corporation (FDIC), a government agency, insures bank accounts. Even if a bank fails, the FDIC will replace depositors' accounts for up to \$100,000. Money market funds offered by brokerage firms are not federally insured, but most brokerage firms have insurance on their accounts.

Liquidity

Liquidity means the ability to quickly turn an investment into cash. An investment such as a car or a business is not very liquid because it has to be sold to be turned into cash. Savings accounts, however, are highly liquid because cash can easily be withdrawn.

Low Rates of Return

Since there is very little risk with a savings account, there is usually a low return. With saving and investing, there is a relationship between rate of return and risk. The lower the risk, the lower the rate of return. The higher the risk, the higher the possibility of getting a higher return.

Inflation Risk

Inflation is a general increase in the cost of goods and services. Inflation risk is the risk that the rate of inflation will increase more than the rate of interest on savings. Suppose you have \$1,000 in a savings account that earns 2 percent interest. During the next year, inflation is 4 percent. That means it costs \$1,040 at the end of the year to buy what you could have bought at the beginning of the year for \$1,000. Interest rates on most savings accounts fluctuate with inflation. However, the main risk with CDs is that their interest rates are locked in for a specific period of time.

The Costs of Savings Accounts

Savings accounts earn interest, but they can also cost money. Some accounts charge a penalty for early withdrawal or if the account balance falls below a certain minimum during a given period. Other accounts charge a fee for each deposit and withdrawal. The money you earn in interest on a savings account is also considered income. As a result, you have to pay income tax on it.

Section 30.2





Review Key Concepts

- **1.** What is the difference between a regular savings account, a certificate of deposit, and a money market fund?
- 2. Discuss some advantages and disadvantages of savings accounts.
- 3. What is the Federal Deposit Insurance Corporation, and what does it do?

Academic Skills

- 4. English Language Arts Work in a group of four to write, design, and produce a brochure titled "Saving—the Key to Your Future." Develop the content of the brochure around ways to make saving a regular habit. Include testimonials from people for whom saving has made a difference in their lives.
- 5. English Language Arts Collect brochures or other printed material from local banks containing information concerning the method each uses to compute interest. Analyze each to determine which communicate most effectively and how others might be improved. Present your findings orally and visually.



Go to the *Introduction to Business* Online Learning Center through **glencoe.com** to check your answers.

Chapter 30 Review and Activities

Section 30.1 Summary

Savings Account Basics Saving is putting aside money for future use. The three main reasons for saving money are to make major purchases, for emergencies, and for retirement. Financial institutions pay interest on savings accounts in return for using savers' money. As with a credit account, the amount of interest earned depends on the interest rate, the size of the account, and the length of time you keep the account. Savings accounts earn simple interest or compound interest. Savings can grow more quickly with compound interest.

Section 30.2 Summary

Types of Savings Accounts
savings and loans, and other financial
institutions offer several types of savings
accounts. Regular savings accounts,
certificates of deposit, and money market
funds are the major types of savings
accounts. Some financial institutions
have their own form of money market fund
called a money market deposit account.
Savings accounts earn interest, are
usually secure, and have high liquidity.
However, they can also cost money in fees
and taxes, and generally carry a low return
that may not keep up with inflation.

Vocabulary Review

1. On a sheet of paper, use each of these key terms and academic vocabulary terms in a sentence.

Key Terms

savings
rate of return
compound interest
regular savings accounts
certificate of deposit (CD)
maturity date
money market fund
money market deposit accounts
liquidity
inflation risk

Academic Vocabulary

experts institution suggest set item duration accumulate mutual

Review Key Concepts

- 2. Discuss the three reasons people save money.
- **3.** Describe compound interest.
- **4.** Differentiate a regular savings account from a CD, a money market fund, and a money market deposit account.
- **5.** Explain two advantages and two disadvantages of savings accounts.

Critical Thinking

- **6.** Why is saving a way of being good to yourself?
- **7.** If you have \$1,000 to put into savings, do not need it for a year, and think that interest rates on savings will decrease, what is the best savings plan for you?
- **8.** What do you think would happen if the FDIC did not exist?
- **9.** How does inflation affect your savings decision?
- **10.** Why is it a good idea to know about the Rule of 72?
- **11.** Why are financial institutions willing to pay a higher rate of interest for a CD than for a regular savings account?
- **12.** Many people have their employer put aside money from their paycheck for savings. Why do you think they do this?
- **13.** Why do you think economists call banks and savings and loan associations intermediaries between savers and borrowers?
- **14.** Why are savings important for the individual consumer and the U.S. economy?

Write About It

- **15.** Research the savings rate of Americans compared to people in other countries. Write an e-mail to your teacher explaining the differences you note.
- **16.** Interview a banker about the relationship between types of savings plans and the interest rates that are offered. Write at least one page about your findings.
- **17.** Write two paragraphs about reasons people at different income levels save the same or different percentages of their income.
- **18.** Determine the nature of the IRA, Roth IRA, and 40l(k) retirement plans. Find out how each of them works. In a one-page report, discuss whether these plans encourage or discourage people from saving.
- 19. People rely upon different sources of income throughout their lives including their savings. Write an e-mail to your teacher listing the sources of retirement income you will rely on to live comfortably.

Technology Applications

Calculating Compound Interest

20. Compound interest is interest earned on both the principal (the money you deposit in your savings account) and any interest you earned on it. Create a spreadsheet and the formulas necessary to calculate interest compounded daily, monthly, and yearly. The spreadsheet should contain at least five different interest rates.

Business Ethics

Risking Someone Else's Future

21. You are a financial planner for Dave, who is 67 years old and retired. He wants to move his retirement account to more high-risk stocks. You would gain a great deal in fees and service charges if he turns all of his savings into stocks. However, he would face more risk if he buys the stocks. What should you do?

Chapter 30 Review and Activities

Applying Academics to Business

English Language Arts

22. Write a paragraph or two about your savings habits. Are you currently saving money on a regular basis? For what are you saving? Do you have a plan for a regular program of saving for the future?

Mathematics

23. Research the maturity dates and related interest rates for CDs from a variety of banks or savings institutions. Make a scatter plot using your data and write a sentence or two about what it shows.

THEORY Data Analysis Scatter plots are similar to line graphs in that they use horizontal and vertical axes. Scatter plots show how much one variable is affected by another.

English Language Arts

24. Based on the meanings of the following words as they are used in this chapter, suggest a synonym and an antonym for each:

benefit compound inflation deposit

Mathematics

- **25.** Compute the total savings on a \$1,000 deposit held for one year in each of the following types of accounts:
 - a. a regular savings account earning3.5% annual simple interest
 - **b.** a CD earning 7% annual interest compounded quarterly
 - c. a CD earning 3.5% annual interest compounded monthly

Interest Rates When computing interest earned on an amount during a period, divide the yearly interest rate, expressed as a decimal, by the number of periods in the year.

Active Learning

Money Left Over

26. Obtain a large jar or other container and ask everyone in your family to "deposit" their change there each night when they come home. After one month, count the money. How much have you saved? As a family, decide what you would like to do with the money.

Business in the Real World

Rephrasing a Brochure

27. Businesses that offer savings accounts use brochures to convey information about their products and services.

Obtain a brochure from a bank or brokerage firm that explains the different kinds of savings plans that it offers. Rewrite it so that it can be understood by a preteen.



FIGURING PENALTIES ON A CD

28. You called a bank to ask about its rates on a \$1,000 CD. A representative told you that it earns 3% compounded quarterly. You ask what would happen if you withdrew the principal after nine months. You would lose the last six months' of interest. How much interest would you give up and how much would you get if you withdrew the money after nine months? What would be the rate of return on your savings given the return that you received?



FIND YOUR DREAM JOB

29. Go to the *Introduction to Business* Online Learning Center through **glencoe.com** for a link to the Occupational Outlook Handbook Web site. Click on the "OOH Search/A-Z Index" link and enter the job category "securities, commodities, and other investments." Then write a one-page report about this area of occupation. Conclude your report with a list of things you could do now to prepare yourself to pursue the occupation.



FINANCIAL ADVISER

30. Situation You are a financial adviser who encourages people to save.

Activity Make a presentation about why people should save, including why it is important to them individually, and why it is important to the economy.

Evaluation You will be evaluated on how well you meet the following performance indicators:

- Explain the reasons saving is important for individuals.
- Describe reasons saving is important to the economy.
- Organize your presentation logically.
- Answer questions about saving.
- Project your voice and use correct grammar.

Standardized Test Practice

Directions Choose the letter of the best answer. Write the letter for the answer on a separate piece of paper.

- 1. How much interest was earned during the first month on a deposit of \$4,000 in an account earning 6% annual interest compounded quarterly?
 - A \$240
 - B \$60
 - C \$40
 - D \$20



TEST-TAKING TIP When studying in small groups, make sure your study group includes only students who are serious about studying.



READING Go to the *Introduction to Business* Online Learning Center through **glencoe.com** for a list of outside reading suggestions.