

Housing Costs

Before YOU READ

What You'll Learn

Section 10-1 Compute the mortgage loan amount.

Section 10-2 Determine the monthly payment, total amount paid, and total interest charged.

Section 10-3 Figure out the total closing costs.

Section 10-4 Compute the allocation of monthly payment toward principal, interest, and the new principal.

Section 10-5 Calculate the assessed value and real estate taxes.

Section 10-6 Work out the amount of coverage.

Section 10-7 Calculate the annual homeowners insurance premium.

Section 10-8 Compute the total housing cost and compare it with suggested guidelines.

When Will You Ever Use This?

At some point in your life you might want to buy a house and make it your home. In doing so you'll need to take into consideration all the costs involved in buying a house.

Key Words to Know

- mortgage loan
- interest
- closing costs
- principal
- real estate taxes
- assessed value
- tax rate
- market value
- rate of assessment
- homeowners insurance
- loss-of-use coverage
- personal liability
- medical coverage
- replacement value
- premium
- fire protection class
- utility costs

Mathematics Online

To learn more about buying a house, visit busmath.glencoe.com.





Living *in the* Real World

The Hunt to Find a Home

Sometimes finding the right house at the right price in the right location is nothing short of a miracle. In this chapter you'll follow a family searching for a home.

Read on. Go to . . .

<i>Looking at Life 15 or 30 Years from Now</i>	p. 344
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<i>That Will Cost You</i>	p. 349
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SECTION 10-1 Mortgage Loans

Section Objective

Compute the mortgage loan amount.

When you purchase a home, first you'll make a down payment. Generally, the down payment is between 10 percent and 40 percent of the selling price, although many first-time homeowners put down 5 percent.

You finance the remaining portion of the selling price with a **mortgage loan** from a lender, such as a bank, savings and loan association, credit union, or mortgage company. The mortgage gives the lender the right to seize and sell the property if you fail to make the payments. The mortgage loan is usually repaid with interest in equal monthly payments. Remember that:

$$\text{Mortgage Loan Amount} = \text{Selling Price} - \text{Down Payment}$$

Living in the Real World

The Hunt to Find a Home

Looking at Life 15 or 30 Years from Now Shereen and Torian Sultan are driving through the various neighborhoods in their Texas town to look at houses. They have two children and want to buy a house in a safe neighborhood close to a school.

Draw Conclusions Why do you think a majority of homeowners take out 15- to 30-year mortgages as opposed to a 5-year mortgage?

Continued on page 346



Example 1

Jessica and Kirk Cramer consider purchasing a new home for \$140,000. A 15 percent down payment is required. What is the amount of the mortgage loan needed to finance the purchase?

STEP 1: Find the down payment.

$$\$140,000 \times 15\% = \$21,000$$

STEP 2: Find the mortgage loan amount.

Selling Price – Down Payment

$$\$140,000 - \$21,000 = \$119,000 \text{ mortgage loan amount}$$



$$140000 \times 15\% 21000 \quad 140000 - 21000 = 119000$$

Need Help? Go to...

- ▶ **Workshop 14:** Finding a Percentage, page 30
- ▶ **Skill 30:** Finding the Percentage, page 757
- ▶ **Skill 4:** Subtracting Whole Numbers, page 731
- ▶ **Skill 6:** Subtracting Decimals, page 733

CONCEPT CHECK

SELF-CHECK

Complete the problems, then check your answers at the end of the chapter. Find the down payment and the amount of the mortgage.

- | | |
|---|--|
| <p>1. It has a \$80,000 selling price. You put down 25 percent.</p> | <p>2. It has a \$200,000 selling price. You put down 30 percent.</p> |
|---|--|

SECTION 10-1 PRACTICE

	Buyer	Selling Price	Portion of Down Payment	Amount of Down Payment	Mortgage Loan Amount
3.	Sumika Ganet	\$ 87,000	20%	\$17,400	a.
4.	Carla Gonzalez	62,500	25%	a.	b.
5.	Albert Nash	298,800	$\frac{1}{4}$	a.	b.
6.	Dario Valencia	156,000	$\frac{2}{5}$	a.	b.

- | | |
|--|---|
| <p>7. David and Peggy Chin. Modular home is priced at \$77,400. They made a 20 percent down payment. What is the mortgage loan amount?</p> | <p>8. Alvira and Berry Fukunaga. Home is priced at \$280,000. They put down $\frac{2}{5}$. What is the mortgage loan amount?</p> |
|--|---|
9. Rita and Alfred Johnson offered \$85,000 for a home that had been priced at \$90,000. The Johnsons and the seller agreed on a selling price of \$86,500. What is the amount of the mortgage loan if they make a 20 percent down payment?
10. Richard Darman offered \$112,500 for a home that had been priced at \$125,000. The seller agreed to the offer. A bank is willing to finance the purchase if he can make a down payment of $\frac{1}{4}$ of the selling price. What is the amount of his mortgage loan?
11. The Hasbros have purchased a duplex. They would use the rental income from one part of the duplex to help meet the mortgage payments. A selling price of \$100,800 was agreed upon. What is the amount of the mortgage loan if a down payment of 30 percent is required?
12. Dan and Sue Willingham have saved \$14,000 for a down payment on their future home. Their bank has informed them that the minimum down payment required to obtain a mortgage loan is 20 percent. What is the most that they can spend for a home and expect to receive bank approval for their loan?

MAINTAINING YOUR SKILLS

Find the percentage.

- | | | |
|-------------------|-----------------------------|-------------------|
| 13. 15% of 40,000 | 14. $\frac{1}{4}$ of 84,000 | 15. 20% of 90,000 |
|-------------------|-----------------------------|-------------------|

Subtract.

- | | | |
|--------------------|---------------------|----------------------|
| 16. 40,000 - 8,400 | 17. 94,000 - 18,000 | 18. 180,000 - 36,000 |
|--------------------|---------------------|----------------------|

Need Help? Go to...

➤ **Skill 30:** Finding the Percentage, page 757

➤ **Skill 4:** Subtracting Whole Numbers, page 731

SECTION 10-2

Monthly Payment and Total Interest

Section Objective

Determine the monthly payment, total amount paid, and total interest charged.

Lenders that make mortgage loans charge **interest**. This is the amount of money paid for the use of the lender's money. The interest rate will vary from lender to lender, so it pays to shop around. If you know the annual interest rate, the amount of the loan, and the length of the loan, you can use a table to find the monthly payment, total amount paid, and total interest charged. It looks like this:

Figure 10.1

Monthly Payment for a \$1,000 Loan*			
Interest Rate	Length of Loan in Years		
	20	25	30
5.00%	\$6.60	\$5.85	\$5.37
5.50%	6.88	6.14	5.68
6.00%	7.16	6.44	6.00
6.50%	7.46	6.75	6.32
7.00%	7.75	7.07	6.65
7.50%	8.06	7.39	6.99
8.00%	8.36	7.72	7.34
8.50%	8.68	8.05	7.69

*An expanded form can be found in the Appendix on page 799.

$$\text{Monthly Payment} = \frac{\text{Amount of Mortgage}}{\$1,000} \times \text{Monthly Payment for } \$1,000 \text{ Loan}$$

$$\text{Amount Paid} = \text{Monthly Payment} \times \text{Number of Payments}$$

$$\text{Total Interest Charged} = \text{Amount Paid} - \text{Amount of Mortgage}$$

Living in the Real World

The Hunt to Find a Home

Curb Appeal Torian slows down their car, and he and Shereen look at a small stone house with shutters and a flower garden. They are so excited, neither of them notices the front porch is sagging and the roof needs replacing.

"I'm just hoping interest rates will go down soon," Shereen says, "so we won't have to pay so much each month."

Draw Conclusions Can you shop around for mortgage rates or are they all the same no matter where you go?

Continued on page 349



Today the Department of Housing and Urban Development is the federal agency charged with the mission of securing "a decent, safe, and sanitary home and suitable living environment for every American."



7. Charles and Sandy Compton.
Mortgage: \$80,000.
Terms: 6.5 percent for 25 years.
 - a. What is the monthly payment?
 - b. What is the total amount paid?
 - c. What is the total interest charged?
8. Abigail and Karlis Krisjanis.
Mortgage: \$70,000.
Terms: 7 percent for 20 years.
 - a. What is the monthly payment?
 - b. What is the total amount paid?
 - c. What is the total interest charged?
9. Julie Hardy.
Selling price: \$150,000.
Down payment: 10 percent.
Terms: 5.5 percent for 20 years.
What is the total interest charged?
10. Diane Novak.
Selling price: \$250,000.
Down payment: 25 percent.
Terms: 7 percent for 30 years.
What is the total interest charged?
11. Ivan and Vicki Egan have obtained a \$60,000 mortgage loan at an annual interest rate of 7.5 percent for 15 years. What is the monthly payment? What is the total amount to be paid?
12. Salma and Coron Broomall have reached an agreed-upon selling price of \$197,000. They plan to make a 30 percent down payment and finance the rest at 6 percent for 15 years. What is the monthly payment? What is the total amount to be paid?
13. Ellen and Clyde Perez reached an agreed-upon price of \$124,000 for the purchase of a house. They made a down payment of \$14,000 and could finance the remaining amount in one of two ways: at 5.5 percent for 25 years or at 6 percent for 20 years. Which mortgage results in a larger amount of interest paid? How much greater?

MAINTAINING YOUR SKILLS

Multiply.

14. 24×120.50

15. 36×431.2

16. 12×832.40

Subtract.

17. $75,500 - 22,200$

18. $92,461 - 12,420$

19. $453,821.50 - 100,000$

Need Help? Go to...

► Skill 8: Multiplying Decimals, page 735

► Skill 6: Subtracting Decimals, page 733

SECTION 10-3

Closing Costs

Section Objective

Figure out the total closing costs.

At the time you sign the documents transferring ownership of the home to you, the lender charges **closing costs**. Closing costs may include fees for lawyers, credit checks and title searches, surveys, taxes, and the preparation of the documents. Some lenders charge a flat fee regardless of the amount of the loan. Some lenders charge a percent of the amount of the loan. Other lenders charge itemized fees at the closing. Remember that:

$$\text{Closing Costs} = \text{Sum of Bank Fees}$$

Living in the Real World

The Hunt to Find a Home

That Will Cost You The Sultans decide to make an offer on the house. The young couple is at the bank to discuss the cost of borrowing money for a mortgage. Bud Ayala, one of the mortgage officers at their Texas bank, talks about how much of a down payment they should put toward the house and how different down payments will change what they borrow, and therefore affect their monthly payments. Then he mentions additional costs.

Draw Conclusions Why might the lender charge additional costs (over and above the loan documents)?

Continued on page 351

Need Help? Go to...

► Skill 3: Adding Whole Numbers, page 730

Example 1

Trudy and Germane Hallett have been granted a mortgage loan at an annual interest rate of 8 percent for 25 years by State Bank. The home has a selling price of \$95,500. They need a 15 percent down payment. State Bank will allow them to finance the closing costs as part of the mortgage.

What are the total closing costs? What is the actual amount financed with the mortgage?

STEP 1: Find the down payment.

$$\$95,500 \times 15\% = \$14,325$$

STEP 2: Find the amount of the mortgage.

$$\begin{aligned} \$95,500 - \$14,325 \\ = \$81,175 \end{aligned}$$

STEP 3: Find the closing costs.

(See the Closing Costs table.)

STEP 4: Find the actual amount financed.

Amount of Mortgage + Closing Costs

$$\$81,175 + \$3,194.96 = \$84,369.96 \text{ financed}$$

Closing Costs	
Credit report	\$ 65.00
Loan origination	2% of mortgage
Abstract of title	120.00
Attorney fee	250.00
Documentation stamp	0.3% of mortgage
Processing fee	1.10% of mortgage
Total Closing Costs	\$3,194.96

CONCEPT CHECK

SELF-CHECK

Complete the problem, then check your answer at the end of the chapter.

1. Kyung Ja and Hideo Hakola have been granted a mortgage loan at an annual interest rate of 7.5 percent for 15 years by USA Mortgage. The home has a selling price of \$105,000. They need a 10 percent down payment. USA Mortgage will allow them to finance the closing costs as part of the mortgage. Use the table on page 349 to find the total closing costs. What is the actual amount financed with the mortgage?

SECTION 10-3 PRACTICE

Use the Closing Costs table on page 349 to solve.

2. Jeremy Roberts.
Mortgage loan of \$50,000.
What are the total closing costs?
3. Vincent and Sue Hemsley.
Mortgage loan of \$95,000.
What are the total closing costs?
4. Ralph and Cristi Sheen.
Mortgage loan of \$271,000.
 - a. What are the total closing costs?
 - b. What is the total amount of the mortgage if the closing costs are financed?
5. Jack and Dina King.
Mortgage loan of \$420,000.
 - a. What are the total closing costs?
 - b. What is the total amount of the mortgage if the closing costs are financed?
6. Lateefah and Eric Lewis have been granted a mortgage loan at an annual interest rate of 5.5 percent for 15 years. The home has a selling price of \$175,000, and they need a 20 percent down payment. The bank will allow them to finance the closing costs as part of the mortgage. The total closing costs are 3.5 percent of the mortgage. What is the total of the closing costs? What is the actual amount financed with the mortgage?
7. Barry and Ella Ellerbee have agreed to purchase a house for \$96,500. Universal Savings and Loan Association is willing to lend the money at 6 percent for 25 years, provided they can make a \$10,000 down payment. The total closing costs are 3.25 percent of the amount of the mortgage loan. What is the total of the closing costs? What is the total of the mortgage if they finance the closing costs?
8. Rene and Jefferson Franklin are interested in purchasing a \$60,000 home. They plan to make a 20 percent down payment and finance the remaining amount through Peabody Savings Association. Peabody Savings has these closing costs: credit report, \$80; appraisal report, \$255; title insurance, \$190; survey and photographs, \$325; recording fee, \$65; legal fees, \$280; and property taxes, \$789. If the loan is approved, how much cash will the Franklins need to secure the loan, including the down payment?

MAINTAINING YOUR SKILLS

Need Help? Go to...

 **Skill 30: Finding the Percentage,**
page 757

Find the percentage.

- | | | |
|--------------------|---------------------|---------------------|
| 9. 15% of 9,000 | 10. 4% of 86,000 | 11. 7% of 252,000 |
| 12. 2.4% of 78,000 | 13. 3.3% of 83,000 | 14. 1.2% of 30,000 |
| 15. 0.3% of 92,000 | 16. 0.15% of 85,100 | 17. 0.04% of 22,300 |

SECTION 10-4 The Monthly Payment

Section Objective

Compute the allocation of monthly payment toward principal, interest, and the new principal.

Most mortgage loans are repaid in equal monthly payments. Each payment includes an amount for payment of interest and an amount for payment of the **principal** of the loan, or the amount borrowed to finance the mortgage. The amount of interest is calculated using the simple interest formula:

$$\text{Interest} = \text{Principal} \times \text{Rate} \times \text{Time}$$

The amount of principal that you owe decreases with each payment that you make. The chart shows the interest and principal paid in the first 4 months of an \$80,000 mortgage loan. (See **Figure 10.2**.)

Figure 10.2

\$80,000 Mortgage Loan at 8% for 30 Years				
Payment Number	Monthly Payment	Amount for Interest	Amount for Principal	Balance
				\$80,000.00
1	\$587.20	\$533.33	\$53.87	\$79,946.13
2	587.20	532.97	54.23	79,891.90
3	587.20	532.61	54.59	79,837.31
4	587.20	532.25	54.95	79,782.36

Ask yourself these questions in order to solve the answers:

Important Questions	What Formulas Do I Use?
How do I find simple interest?	$\text{Interest} = \text{Principal} \times \text{Rate} \times \text{Time}$
How do I figure out the payment to principal amount?	$\text{Payment to Principal} = \text{Monthly Payment} - \text{Interest}$
How do I figure out the new principal?	$\text{New Principal} = \text{Previous Balance} - \text{Payment to Principal}$

Living in the Real World

The Hunt to Find a Home

How Much Can You Afford a Month? The Sultans and Ayala also discuss monthly payments. Monthly payments include interest and a portion of the principal. However, Ayala explains that since the amount of principal decreases after each monthly payment, the proportion of principal-to-interest also changes each month.

Draw Conclusions Why would most people be interested in the proportion of principal-to-interest for their monthly payments?

Continued on page 355

Example 1

Rod and Carey Finn obtained a 30-year, \$80,000.00 mortgage loan from State Bank and Trust. The interest rate is 8 percent. Their monthly payment is \$587.20. For the first payment, what is the interest? What is the payment to principal? What is the new principal?

STEP 1: Find the interest.

$$\begin{aligned} & \text{Principal} \times \text{Rate} \times \text{Time} \\ & \$80,000.00 \times 8\% \times \frac{1}{12} \\ & = \$533.33 \text{ interest} \end{aligned}$$

STEP 2: Find the payment to principal.

$$\begin{aligned} & \text{Monthly Payment} - \text{Interest} \\ & \$587.20 - \$533.33 \\ & = \$53.87 \text{ payment to principal} \end{aligned}$$

STEP 3: Find the new principal.

$$\begin{aligned} & \text{Previous Balance} - \text{Payment to Principal} \\ & \$80,000.00 - \$53.87 \\ & = \$79,946.13 \text{ new principal} \end{aligned}$$



$$\begin{aligned} & 80000 \times 8 \% \div 12 = 533.33 \quad M+ \quad 587.20 \\ & - \quad RM \quad 533.33 = 53.87 \quad 80000 - 53.87 = 79946.13 \end{aligned}$$

Need Help? Go to...

Workshop 5:
Subtracting
Decimals, page 12

Workshop 6:
Multiplying
Decimals, page 14

Skill 6: Subtracting
Decimals, page 733

Skill 8: Multiplying
Decimals, page 735

CONCEPT CHECK

SELF-CHECK

Complete the problems, then check your answers at the end of the chapter. In the example above, the new principal is \$79,946.13. For the second payment, find:

1. The interest on \$79,946.13.
2. The payment to principal.
3. The new balance.

Example 2

The amount of principal that you owe decreases with each payment that you make. The chart shows the interest and principal paid for payment numbers 325, 326, and 327 on an original \$80,000 mortgage loan. For payment number 328, what is the interest? What is the payment to principal? What is the new principal?

Figure 10.3

\$80,000 Mortgage Loan at 8% for 30 Years				
Payment Number	Monthly Payment	Amount for Interest	Amount for Principal	Balance
				\$18,517.69
325	\$587.20	\$123.45	\$463.75	\$18,053.94
326	587.20	120.36	466.84	17,587.10
327	587.20	117.25	469.95	17,117.15



STEP 1: Find the interest.

$$\begin{aligned} & \text{Principal} \times \text{Rate} \times \text{Time} \\ & \$17,117.15 \times 8\% \times \frac{1}{12} \\ & = \$114.11 \text{ interest} \end{aligned}$$

STEP 2: Find the payment to principal.

$$\begin{aligned} & \text{Monthly Payment} - \text{Interest} \\ & \$587.20 - \$114.11 \\ & = \$473.09 \text{ payment to principal} \end{aligned}$$

STEP 3: Find the new principal.

$$\begin{aligned} & \text{Previous Balance} - \text{Payment to Principal} \\ & \$17,117.15 - \$473.09 \\ & = \$16,644.06 \text{ new principal} \end{aligned}$$

CONCEPT CHECK**SELF-CHECK**

In the example above, the new principal is \$16,644.06. For payment number 329, find:

4. The interest on \$16,644.06.
5. The payment to principal.
6. The new balance.

SECTION 10-4 PRACTICE

	Mortgage Amount	Interest Rate	1 st Monthly Payment	Amount for Interest	Amount for Principal	New Principal
7.	\$ 50,000	8.0%	\$ 478.00	\$333.33	\$144.67	a.
8.	70,000	6.0%	420.00	a.	b.	c.
9.	60,000	5.5%	368.40	a.	b.	c.
10.	120,000	6.5%	1,045.20	a.	b.	c.
11.	225,000	7.0%	1,437.75	a.	b.	c.

12. Lois Larczyk.
Mortgage loan of \$46,000.00.
Interest rate is 5 percent.
Monthly payment is \$269.10.
How much of the first monthly payment is for interest?
13. Patrick Yunker.
Mortgage loan of \$84,000.
Interest rate is 6 percent.
Monthly payment is \$504.
How much of the first monthly payment is for interest?

Continued on next page



- 14.** Matthew Roberts.
Mortgage loan of \$38,600.00.
Interest rate is 5.5 percent.
Monthly payment is \$265.57.
- How much of the first monthly payment is for interest?
 - How much of the first payment is for principal?
 - What is the new principal?
- 15.** Dee Pollom.
Mortgage loan of \$98,000.00.
Interest rate is 7.5 percent.
Monthly payment is \$686.00.
- How much of the first monthly payment is for interest?
 - How much of the first payment is for principal?
 - What is the new principal?
- 16.** Jill Barley obtained a 25-year, \$60,000.00 mortgage loan from University Savings and Loan Association. The interest rate is 6 percent. The monthly payment is \$386.40. For the first payment, what is the interest? What is the payment to principal? What is the new balance?
- 17.** Norman Foster obtained a 30-year, \$180,000.00 mortgage loan from American Savings and Loan Association. The interest rate is 7 percent. His monthly payment is \$1,197.00. For the first payment, what is the interest? What is the payment to principal? What is the new balance?
- 18.** Amelia McGuire obtained a 20-year, \$36,000.00 mortgage loan from Society Trust Company. The interest rate is 11.5 percent. Her monthly payment is \$383.76. Use this portion of the repayment schedule to find the remaining debt after the payment numbers 42 and 43.

Payment Number	Monthly Payment	Amount for Interest	Amount for Principal	New Balance
41	\$383.76	\$70.78	\$312.98	\$7,072.32
42	383.76	a.	b.	c.
43	383.76	d.	e.	f.

MAINTAINING YOUR SKILLS

Need Help? Go to...

► **Skill 6: Subtracting**
Decimals, page 733

Subtract.

- | | | |
|-----------------------------|-----------------------------|-----------------------------|
| 19. $48,000 - 29.46$ | 20. $91,800 - 39.55$ | 21. $24,400 - 23.12$ |
| 22. $78,902 - 22.98$ | 23. $18,185 - 45.11$ | 24. $14,915 - 107.7$ |

SECTION 10-5 Real Estate Taxes

Section Objective

Calculate the assessed value and real estate taxes.

When you own a home, you'll have to pay city or county **real estate taxes**. The money collected is used to operate and maintain roads, parks, schools, government offices, and other city expenses. The amount of real estate tax that you pay in one year depends on:

- the **assessed value** of your property (this is the dollar value assigned to a property by a tax assessor for taxation purposes).
- the **tax rate**.

The assessed value is found by multiplying the **market value** of your property by the **rate of assessment**. The market value is the price at which a house can be bought or sold. An assessor hired by the municipality determines the market value. The rate of assessment is a percent.

The tax rate is sometimes expressed in *mills* per dollar of assessed value of property. A mill is \$0.001. A tax rate of 80 mills is a tax rate of \$80 per \$1,000 of assessed value. When working with mills, it is often convenient to express mills in dollars by dividing by 1,000.

You might ask yourself again:

Important Questions	What Formulas Do I Use?
How do I find the assessed value ?	$\text{Assessed Value} = \text{Market Value} \times \text{Rate of Assessment}$
How do I find the real estate tax ?	$\text{Real Estate Tax} = \text{Tax Rate} \times \text{Assessed Value}$
How do I calculate mills per dollar of valuation?	$\text{Mill} = \$0.001$ or $\text{Mill} = \$1.00 \div 1,000$

Living in the Real World

The Hunt to Find a Home

You Have Other Costs to Consider Later that evening, after their children are in bed, the Sultans sit at their kitchen table and talk about their finances and whether they'll be able to swing the cost of buying a house. Their housing costs include principal, interest, and closing costs. In addition, they must have enough money to pay for insurance and real estate taxes.

Draw Conclusions What are the benefits of spreading out tax payments?

Continued on page 357

Example 1

The Fulton County tax assessor determined that the market value of Courtland Farm is \$340,000.00. The rate of assessment in Fulton County is 40 percent of market value. The tax rate is 50.73 mills. What is the real estate tax on Courtland Farm?

Continued on next page

STEP 1: Find the assessed value.**Market Value × Rate of Assessment**

$$\$340,000.00 \times 40\% = \$136,000.00 \text{ assessed value}$$

STEP 2: Express the tax rate as a decimal.

$$50.73 \text{ mills} \div 1,000.00 = 0.05073 \text{ tax rate}$$

STEP 3: Find the real estate tax.**Tax Rate × Assessed Value**

$$0.05073 \times \$136,000.00 = \$6,899.28 \text{ real estate tax}$$



$$340000 \times 40\% 136000 M+ 50.73 \div 1000 =$$

$$0.05073 \times RM 136000 = 6899.28$$

CONCEPT CHECK**SELF-CHECK**

Complete the problems, then check your answers at the end of the chapter. The tax rate is 65.50 mills, market value is \$70,000.00, and rate of assessment is 40 percent. Find the following:

- The assessed value.
- The tax rate as a decimal.
- The real estate tax.

SECTION 10-5 PRACTICE

- Lima's home.
Market value is \$72,000.
Rate of assessment is 30 percent.
What is the assessed value?
- The Simms' condominium.
Market value is \$159,800.
Rate of assessment is 40 percent.
What is the assessed value?
- Brenda Roth's home is located in Columbus, Ohio, where the rate of assessment is 35 percent of market value. The tax rate is \$59.56 per \$1,000 of assessed value. Her home has a market value of \$392,000.00. What is its assessed value? What is the property tax?
- The rate of assessment in Foster, Rhode Island, is 50 percent. The tax rate is \$40.20 per \$1,000 of assessed value. What is the real estate tax on a piece of property that has a market value of \$236,000.00?
- Ali and Jackie Erwin live in Providence, Rhode Island, where the tax rate is 29.52 mills. The rate of assessment is 100 percent. The property that the Erwins own has a market value of \$98,400.00. What is their real estate tax for a year?
- Jose and Trudy Engstrom own a home that has a market value of \$675,000.00. They live in Richmond, Virginia, where the rate of assessment is 80 percent and the tax rate is 25.13 mills. What is the annual real estate tax?
- Gina and Tony Jasinski received a tax statement showing that their land has an assessed value of \$7,500 and their buildings have an assessed value of \$42,300. The rate of assessment in their locality is 40 percent. What is the market value of their property?

Need Help? Go to...

► **Skill 8: Multiplying Decimals**, page 735

► **Skill 30: Finding the Percentage**, page 757

MAINTAINING YOUR SKILLS**Multiply.**

11. 37.3×78.4

12. 13.18×9.42

13. 13.30×4.37

Find the percentage.

14. $90,000 \times 20\%$

15. $140,000 \times 45\%$

16. $45,500 \times 33\%$

Section Objective

Work out the amount of coverage.

Once you're a homeowner, you'll want to protect yourself from losses such as fire, theft, and personal liability. To be covered for this protection, you'll want to buy **homeowners insurance**. This policy also includes **loss-of-use coverage**. Let's say that your house is damaged and unlivable, so you're forced to live in a hotel for a couple of weeks. The loss-of-use coverage pays for the expenses of living away from home while the reparations are being completed.

What else does homeowners insurance protect you against? What if a neighbor falls off the deck of your house and breaks her leg? Are you responsible for her accident? Maybe. Just in case that neighbor thinks you are at fault, then **personal liability** and **medical coverage** will protect you from financial losses.

To receive full payment for any loss up to the amount of the policy, you must insure your home for at least 80 percent of its **replacement value**. The replacement value is the amount required to reconstruct your home if it's destroyed. Insurance companies use the amount of coverage on your home to calculate the amount of

Figure 10.4

Coverage	Percent Covered
Garage and other structures	10%
Loss of use	20%
Personal property	50%

coverage you receive on your garage, personal property, and for loss of use.

Remember to ask yourself this question:

Important Question	What Formula Do I Use?
How do I find the amount of coverage for each type of protection?	$\text{Amount of Coverage} = \frac{\text{Amount of Coverage on Home}}{\text{Percent}} \times \text{Percent}$

Living in the Real World

The Hunt to Find a Home

Protect Yourself "What did Mr. Ayala say would be covered in homeowners insurance?" Sheridan asks.

"He said it would cover losses due to fire and theft," Torian says. "And if we can't live in the house for a while, it should cover the expense of renting a place."

Draw Conclusions Suppose that someone comes onto their property and falls on the droopy porch and gets hurt. How will they protect themselves against a lawsuit?

Continued on page 359

Example 1

The replacement value of Joy and Ron Amodeo's home is estimated at \$94,000. They have insured their home for 80 percent of its replacement value. According to the guidelines above and using Figure 10.4, what is the amount of coverage on the Amodeo's personal property?

Continued on next page

STEP 1: Find the amount of coverage on the home.

Replacement Value × Percent

$$\$94,000 \times 80\% = \$75,200 \text{ coverage on home}$$

STEP 2: Find the amount of coverage on personal property.

Amount of Coverage on Home × Percent

$$\begin{aligned} \$75,200 &\times 50\% \\ &= \$37,600 \text{ coverage on personal property} \end{aligned}$$



$$94000 \times 80 \% = 75200 \times 50 \% = 37600$$

SELF-CHECK

Complete the problems, then check your answers at the end of the chapter. A home is insured for 90 percent of its replacement value of \$120,000, or \$108,000. Using the percents from Figure 10.4 on page 357, find the coverage for:

1. Personal property.
2. Loss of use.
3. Garage.

SECTION 10-6 PRACTICE

Use Figure 10.4 on page 357 for the percent of coverage.

4. Replacement value of the home is \$70,000. Eighty percent of the home is covered. What is the amount of insurance?
5. Replacement value of the home is \$95,000. One hundred percent of the home is covered. What is the amount of insurance?
6. Replacement value of the home is \$38,500. Ninety percent of the home is covered.
 - a. What is the amount of insurance?
 - b. What is the amount of coverage for personal property?
7. Replacement value of the home is \$144,000. Eighty percent of the home is covered.
 - a. What is the amount of insurance?
 - b. What is the amount of coverage for loss of use?
8. A home has a replacement value of \$324,000. The owners insure the new home for 90 percent of its replacement value.
 - a. What is the amount of insurance on their home?
 - b. What is the amount of coverage on their garage?
9. A home has a replacement value of \$324,000. The owners insure the new home for 80 percent of its replacement value.
 - a. What is the amount of insurance on their home?
 - b. What is the amount of coverage for personal property?
 - c. What is the amount of coverage for loss of use?
 - d. What is the amount of coverage on their garage?

Need Help? Go to...

► **Skill 30: Finding the Percentage,**
page 757

MAINTAINING YOUR SKILLS

Find the percentage.

10. 10% of \$90,000
11. 80% of \$30,000
12. 50% of 140,000



Homeowners Insurance Premium

Section Objective

Calculate the annual homeowners insurance premium.

What matters the most when buying a home? As they say in real estate: location, location, location. Are you living in a crime-ridden area? Or what about on a mountain vista? Your location even affects your homeowners policy **premium**—the amount you have to pay for insurance coverage. Also the type of house—brick masonry veneer or wood frame—affects your premium. The home will be assigned a number that reflects how fire resistant your house is and how close you are to a water source. This number is called your **fire protection class**.

Living in the Real World

The Hunt to Find a Home

The Insurer Assures You Coverage The Sultans include the cost of homeowners insurance in their total. They look through the information they got at the bank and find the estimated premium for their homeowners insurance on the house they hope to buy.

Draw Conclusions How does an insurance company compute the amount of your premium?

Continued on page 361



Figure 10.5

Homeowners Insurance Premiums										
Annual Premiums for a Typical Homeowners Policy										
Amount of Insurance Coverage	Brick/Masonry Veneer					Wood Frame				
	Fire Protection Class					Fire Protection Class				
	1-6	7-8	9	10	11	1-6	7-8	9	10	11
\$ 40,000	\$ 166	\$ 170	\$ 225	\$ 237	\$ 270	\$ 178	\$ 183	\$ 237	\$ 248	\$ 285
45,000	173	178	233	244	280	187	191	248	260	298
50,000	178	183	241	254	290	190	195	254	265	304
60,000	191	196	259	273	313	205	211	273	287	328
70,000	213	216	285	299	343	225	231	299	315	360
80,000	241	248	328	343	394	257	265	343	363	415
90,000	268	276	365	384	441	289	296	384	403	464
100,000	298	307	407	426	490	320	329	426	449	515
120,000	354	364	484	508	584	381	391	508	534	614
150,000	459	471	625	657	755	493	506	657	692	794
200,000	616	633	841	884	1,017	662	680	884	931	1,070
250,000	737	754	961	1,021	1,167	780	798	1,021	1,086	1,243
300,000	879	901	1,147	1,218	1,394	931	953	1,218	1,295	1,483
400,000	1,021	1,045	1,331	1,413	1,617	1,067	1,105	1,413	1,504	1,723
500,000	1,309	1,340	1,707	1,812	2,074	1,385	1,418	1,812	1,929	2,209

Example 1

The replacement value of Marcia Syke's home is \$150,000. She has insured her home for 80 percent of its replacement value. The home is of wood-frame construction and has been rated in fire protection class 4. What is the annual premium?

STEP 1: Find the amount of coverage.

$$\begin{array}{r} \text{Replacement} \\ \text{Value of Home} \end{array} \times \begin{array}{r} \text{Insured Percent of} \\ \text{Replacement Value} \end{array} \\ \$150,000 \times 80\% = \$120,000 \text{ coverage on home}$$

STEP 2: Find the annual premium. (See Figure 10.5 on page 359.)

- Find the column, Wood Frame.
 - Find the Fire Protection Class 1–6 column.
 - Find the Amount of Insurance Coverage row with 120,000.
 - Follow across the row and down the column to where 120,000 and 1–6 meet.
- = \$381 annual premium

CONCEPT CHECK

SELF-CHECK

Complete the problems, then check your answers at the end of the chapter. For Problems 1 and 2, find the annual insurance premium. Use Figure 10.5 on page 359.

1. Replacement cost is \$100,000.
Insured at 80 percent.
Wood frame, protection class 5.
2. Replacement cost is \$200,000.
Insured at 75 percent.
Brick, protection class 11.

SECTION 10-7 PRACTICE

Use Figure 10.5 on page 359 to find the annual premium.

3. The Campbells' \$50,000 wood frame house. A \$40,000 homeowners policy. Fire protection class 8. What is the annual premium?
4. Kuen Yee's \$100,000 brick home. A \$80,000 homeowners policy. Fire protection class 11. What is the annual premium?
5. The Smiths own a wood-frame home in an area rated fire protection class 1. Their two-family home has a replacement value of \$250,000 and is insured for 80 percent. What is their annual premium?
6. The Quicks own a brick home that has a replacement value of \$375,000. They purchased a homeowners policy for 80 percent of its replacement value. They live in an area rated fire protection class 9. What is their annual policy premium? What would the premium be if they were in class 11?
7. Nelia and Gary Penn own a brick home with a market value and replacement value of \$150,000.00. They insured their home for 100 percent of its replacement value. The Penns live in an area where the rate of assessment is 35 percent, the tax rate is 51.58 mills, and the fire protection is rated class 6. They have a \$120,000.00 mortgage at 8 percent for 20 years. How much is the monthly payment for the mortgage, real estate taxes, and insurance?

MAINTAINING YOUR SKILLS

Find the percentage.

8. 70% of 90,000
9. 80% of 140,000
10. 96% of 148,000
11. 50% of 70,000
12. 40% of 84,500
13. 15% of 71,400

Need Help? Go to...

► Skill 30: Finding the Percentage, page 757

SECTION 10-8

Other Housing Costs

Section Objective

Compute the total housing cost and compare it with suggested guidelines.

In addition to your monthly mortgage payment, real estate taxes, and insurance payment, you'll have expenses for utilities, maintenance, and home improvements. **Utility costs** may include charges for electricity, gas, water, telephone, cell phone, cable TV, Internet service, repairs, and heating fuel. The Federal Housing Administration (FHA) recommends that your total monthly housing cost be less than 35 percent of your monthly net pay or take home pay.

Living in the Real World

The Hunt to Find a Home

What Else Do You Have to Pay For? Before they call it a night, the Sultans estimate the other costs of a new house. These will include gas and electricity; water, sewer, and trash collection; telephone, cable, and Internet service; and repairs.

Draw Conclusions Currently, who pays for their apartment's repairs? Who pays for the repairs once they own a home?

Continued on page 365

Example 1

Figure 10.6

Housing Expenses for May	
Mortgage payment	\$698.24
Insurance ($\$303 \div 12$)	25.25
Real estate taxes ($\$1,885 \div 12$)	157.08
Electricity	65.90
Heating fuel	54.20
Telephone	36.18
Water	26.20
Cell phone	29.95
Satellite TV service	39.95
Loan payment on oven	50.00
Repair storm door	38.68

Sue and Paul Kwan have a combined monthly take-home pay of \$3,320. The list of expenses for May is shown. Were their housing costs for May within the FHA guidelines?

STEP 1: Find the total monthly cost.

Sum of expenses:
= \$1,221.63

STEP 2: Find the recommended maximum.

$\$3,320.00 \times 35\%$
= \$1,162.00

STEP 3: Compare. Is the total monthly cost less than the recommended maximum?

Is \$1,221.63 less than \$1,162.00?

No, the Kwans are not within the guidelines.

$$698.24 + 25.25 + 157.08 + 65.9 + 54.2 + 36.18 + 26.2 + 29.95 + 39.95 + 50 + 38.68 = 1221.63$$

$$3320 \times 35\% = 1,162$$



CONCEPT CHECK

SELF-CHECK

Complete the problem, then check your answer at the end of the chapter.

Housing Expenses for April	
Mortgage payment	\$644.00
Insurance ($\$490 \div 12$)	40.83
Real estate taxes ($\$2,740 \div 12$)	228.38
Electricity	66.24
Heating fuel	78.26
Telephone	39.62
Water	45.25
Cell phone	39.95
Satellite service	51.50
Home equity loan	75.00
Miscellaneous repairs	59.65

1. Dan Hosteler has a monthly take-home pay of \$4,100. The list of expenses for April is shown. Were his housing costs for April within the FHA guidelines?

SECTION 10-8 PRACTICE

Find the recommended FHA maximum. (Round to nearest \$1.)

	Monthly Net Pay	Recommended FHA Minimum
2.	\$1,100	
3.	3,900	
4.	880	
5.	4,284	
6.	5,439	
7.	7,942	

Figure 10.7

Housing Expenses for June	
Rent payment	\$450.00
Renters insurance	12.50
Electricity	55.44
Gas—heat	44.00
Basic cable service	22.50
Telephone service	44.98
Appliance loan	82.35

8. Joshua and Peg Ryder. Monthly net pay is \$1,980.
 - a. Find the total housing cost. (See **Figure 10.7**.)
 - b. Is it within the FHA recommendation?

Figure 10.8

Condo Expenses for March	
Mortgage payment	\$533.50
Insurance	19.75
Home equity loan	132.40
Electricity	75.80
Gas—heat	85.00
Satellite TV	51.00
Telephone service	29.45
Condo fee	155.00
Water	22.00

9. Frank and Yvette Shelby. Monthly net pay is \$3,200.
 - a. Find the total housing cost. (See **Figure 10.8**.)
 - b. Is it within the FHA recommendation?

10. Fara Pinkston recorded her housing expenses for the month of August: mortgage payment, \$347.90; insurance, \$17.00; taxes, \$84.00; electricity, \$64.40; phone service, \$33.50; fuel, \$98.25; water, \$17.44; and repairs, \$79.87. Her monthly take-home pay is \$2,150.00. What is her total monthly cost? Is it within the FHA recommendation?
11. Melvin Hayashi recorded his housing expenses for the month of December: \$548.36 for mortgage payment, \$29.50 for insurance premium, \$122.50 for real estate taxes, \$46.75 for refrigerator installment payment, \$104.70 for electricity, \$34.40 for telephone service, \$86.70 for home heating oil, and \$21.80 for water. His monthly take-home pay is \$2,500.00. What is his total monthly housing cost? Is it within the FHA recommendation?
12. David and Helen Voss have a combined monthly net income of \$4,750.00. Their records show that for last year they paid \$10,789.20 in mortgage payments, \$281.00 for insurance premiums, and \$2,085.00 in real estate taxes. In addition, they had the expenses shown. What was their average monthly housing cost for last year? Was it within the FHA recommendation?

Annual Home Expenses	
Water/sewer charges	\$ 292.00
Electricity	940.00
Telephone service	559.92
Water heater	490.32
Repair windows	580.10
New air conditioner	2,458.68
Replace gutters	1,760.00
New lawn mower	579.20
Total	

For Problem 13, use Figure 10.1 on page 346 to find the loan payment and Figure 10.5 on page 359 to find the insurance premium.

13. Molly and Chris Spaulding recently purchased a brick house for \$150,000.00. They made a 20 percent down payment and financed the remaining amount at 8 percent for 30 years. The tax rate in their area is 71.57 mills and the rate of assessment is 40 percent. They purchased a homeowners insurance policy for the purchase price of the house. The fire protection in the neighborhood is rated class 9. For the month of August, they recorded the following housing expenses: \$69.20 for electricity, \$44.85 for telephone service, \$39.95 for cable TV, \$18.80 for water, and \$74.65 to repair a door. They have a combined monthly net income of \$5,400.00. What is their monthly mortgage payment? What is the monthly insurance premium? What are their monthly taxes? What was their total monthly housing cost for August? Is it within the FHA recommendation?

MAINTAINING YOUR SKILLS

Which number is greater?

14. 2,109.8 or 2,107.9

15. 7,484.08 or 74,846.50

Add.

16. $85.89 + 74.84 + 35.30 + 306.24$

17. $456.26 + 24.98 + 24.50 + 9.39$

Find the percentage. Round answers to the nearest hundredth.

18. 35% of 8,300

19. 40% of 4,600

Need Help? Go to...

► Skill 1: Numbers, page 727

► Skill 5: Adding Decimals, page 732

► Skill 30: Finding the Percentage, page 757

SECTION 10-1

CONCEPT CHECK (p. 345)

- $\$80,000 \times 0.25 = \$20,000$; $\$80,000 - \$20,000 = \$60,000$
- $\$200,000 \times 0.30 = \$60,000$; $\$200,000 - \$60,000 = \$140,000$

SECTION 10-2

CONCEPT CHECK (p. 347)

- $\frac{\$90,000.00}{\$1,000.00} \times \$6.60 = \594.00 monthly payment
 $\$594.00 \times 12 \times 20 = \$142,560.00$ amount paid
 $\$142,560.00 - \$90,000.00 = \$52,560.00$ interest charged

SECTION 10-3

CONCEPT CHECK (p. 350)

- Find the mortgage amount. $\$105,000 \times 0.10 = \$10,500$
 $\$105,000 - \$10,500 = \$94,500$
 Find the sum of the bank fees.

Credit report	\$ 65.00
Loan origination: $\$94,500 \times 2\%$	1,890.00
Abstract of title	120.00
Attorney fee	250.00
Documentation stamp: $\$94,500 \times 0.3\%$	283.50
Processing fee: $\$94,500 \times 1.10\%$	<u>1,039.50</u>
Total Closing Costs	<u>\$3,648.00</u>

Amount of Mortgage + Closing Costs

$$\$94,500.00 + \$3,648.00 = \$98,148.00 \text{ amount financed}$$

SECTION 10-4

CONCEPT CHECK (p. 352, 353)

- Interest on $\$79,946.13$: $\$79,946.13 \times 8\% \times \frac{1}{12} = \532.97
- Payment to principal: $\$587.20 - \$532.97 = \$54.23$
- New balance: $\$79,946.13 - \$54.23 = \$79,891.90$
- Interest on $\$16,644.06$: $\$16,644.06 \times 8\% \times \frac{1}{12} = \110.96
- Payment to principal: $\$587.20 - \$110.96 = \$476.24$
- New balance: $\$16,644.06 - \$476.24 = \$16,167.82$

SECTION 10-5

CONCEPT CHECK (p. 356)

- $\$70,000 \times 0.40 = \$28,000$
- $65.50 \div 1,000 = 0.0655$
- $0.0655 \times \$28,000 = \$1,834$

SECTION 10-6

CONCEPT CHECK (p. 358)

- $\$54,000$
- $\$21,600$
- $\$10,800$

SECTION 10-7

CONCEPT CHECK (p. 360)

- Coverage is $\$100,000 \times 80\% = \$80,000$; Wood frame, class 5, premium is $\$257$
- Coverage is $\$200,000 \times 75\% = \$150,000$; Brick, class 11, premium is $\$755$

SECTION 10-8

CONCEPT CHECK (p. 362)

- Total monthly cost = $\$1,368.68$; Recommended maximum = $\$4,100 \times 35\% = \$1,435$; $\$1,435 > \$1,368.68$; Total monthly cost is less than recommended maximum, therefore, within the guidelines.

Living in the Real World

The Hunt to Find a Home

Analyze the Story The Sultans had a lot to consider before signing the dotted line and turning over a down payment. They had to consider a feasible monthly mortgage, the cost of utilities and other services, and taxes and insurance.

- 1 **Drawing.** As a class come up with your own plan to purchase a home. Make a table or chart showing your monthly expenses and annual expenses (like taxes and insurance). Ask friends and family members what are typical costs involved based upon living in your area.
- 2 **Examining.** Buying a home requires many trade-offs. For example, the house you might want to live in is close to work, but it's too expensive. Different life situations will require different housing choices. What might be a wise housing choice for a single parent—buying or renting?



After YOU READ

REVIEW OF KEY WORDS

mortgage loan (p. 344)

interest (p. 346)

closing costs (p. 349)

principal (p. 351)

real estate taxes (p. 355)

assessed value (p. 355)

tax rate (p. 355)

market value (p. 355)

rate of assessment (p. 355)

homeowners insurance (p. 357)

loss-of-use coverage (p. 357)

personal liability (p. 357)

medical coverage (p. 357)

replacement value (p. 357)

premium (p. 359)

fire protection class (p. 359)

utility costs (p. 361)

Match one of the key words above with a definition below.

1. an amount paid for an insurance policy.
2. a loan whereby the lender has the right to sell the property if payments are not made.
3. fees paid at the time documents are signed transferring ownership of a home.
4. public services such as water, phone, electricity, and garbage pickup.
5. an amount owed upon which interest charged is calculated.
6. fees collected on the ownership of property used to support the operation of government.
7. the price at which a house can be bought or sold.
8. pays for the expenses of living away from home while home reparations are being completed.
9. the amount required to reconstruct your home if it is destroyed.
10. a number that reflects the quality of fire protection in your area.

SECTION OBJECTIVE 10-1 AND EXAMPLES

Compute the mortgage loan amount.

Desiree Ramsey is considering the purchase of a new condominium for \$95,500. A 20 percent down payment is required. What is the amount of the mortgage loan needed to finance the purchase?

STEP 1: Find the down payment.

$$\$95,500 \times 20\% = \$19,100$$

STEP 2: Find the mortgage loan amount.

$$\text{Selling Price} - \text{Down Payment}$$

$$\$95,500 - \$19,100$$

$$= \$76,400 \text{ mortgage loan amount.}$$

REVIEW EXERCISES

Complete the table below.

	Selling Price	Down Payment	Down Payment	Mortgage Loan Amount
11.	\$132,600	25.0%	a.	b.
12.	87,500	15.0%	a.	b.
13.	306,200	$17\frac{1}{2}\%$	a.	b.
14.	198,000	$\frac{1}{8}$	a.	b.

SECTION OBJECTIVE 10-2 AND EXAMPLES

Determine the monthly payment, total amount paid, and total interest charged.

Dee and Cissy White have applied for a \$125,500 mortgage loan at an annual interest rate of 6 percent. The loan is for a period of 25 years and will be paid in equal monthly payments that include interest. What is the total amount of interest charged?

STEP 1: Find the monthly payment. (Refer to Figure 10.1 on page 346.)

$$\frac{\text{Amount of Mortgage}}{\$1,000} \times \text{Monthly Payment for a \$1,000 Loan}$$

$$\frac{\$125,500}{\$1,000} \times \$6.44$$

$$= \$808.22 \text{ monthly payment}$$

STEP 2: Find the amount paid.

$$\begin{aligned} &\text{Monthly Payment} \times \text{Number of Payments} \\ & \$808.22 \times (12 \text{ months} \times 25 \text{ years}) \\ & \$808.22 \times 300 \\ & = \$242,466 \text{ amount paid} \end{aligned}$$

STEP 3: Find the total interest charged.

$$\text{Amount Paid} - \text{Amount of Mortgage}$$

$$\$242,466 - \$125,000$$

$$= \$116,966 \text{ total interest charged}$$

REVIEW EXERCISES

Complete the table below.

	Mortgage	Years	Rate	Monthly Payment	Total Amount Paid	Total Interest Charged
15.	\$ 75,500	25	5.5%	a.	b.	c.
16.	83,900	20	6.0%	a.	b.	c.
17.	123,900	25	6.5%	a.	b.	c.
18.	156,000	30	7.5%	a.	b.	c.

SECTION OBJECTIVE 10-3 AND EXAMPLES

Figure out the total closing costs.

Shannon and Glenn Shelton have been granted a \$150,000 loan. When they sign the papers to purchase their new home, they will have to pay the closing costs shown. What is the total of their closing costs? What is the actual amount financed with the mortgage?

Closing Costs	
Appraisal fee	\$250
Credit report	75
Title search	275
Service fee	1.3% of mortgage
Legal fees	295

STEP 1: Find the closing costs. (Refer to the chart next to this problem.)

$$\$250 + \$75 + \$275 + (\$150,000 \times 1.3\%) + \$295 = \$2,845$$

STEP 2: Find the actual amount financed.

Amount of Mortgage + Closing Costs

$$\begin{array}{r} \$150,000 \\ + \quad \$2,845 \\ \hline = \$152,845 \text{ amount financed} \end{array}$$

Closing Costs	
Credit report	\$ 55
Loan origination	2% of mortgage
Abstract of title	155
Attorney fee	325
Documentation stamp	0.325% of mortgage
Processing fee	1.10% of mortgage

REVIEW EXERCISES

Use the list of closing costs for Problems 19–22.

- | | |
|--|--|
| 19. Sung and Mu Lee.
Mortgage loan of \$245,600.
What are the total closing costs? | 21. Josh and Judy Jones.
Mortgage loan of \$128,300.
What are the total closing costs? |
| 20. Greg and Kaye Meiers.
Mortgage loan of \$97,500.
What are the total closing costs? | 22. Rochelle St. James.
Mortgage loan of \$88,000.
What are the total closing costs? |

SECTION OBJECTIVE 10-4 AND EXAMPLES

Compute the allocation of monthly payment toward principal, interest, and the new principal.

Rowena Tinley obtained a 30-year \$90,000.00 mortgage from State Bank. The interest rate is 7.5 percent. Her monthly payment is \$629.10. For the first payment, what is the interest? What is the payment to principal? What is the new principal?

STEP 1: Find the interest. $\text{Principal} \times \text{Rate} \times \text{Time}$
 $\$90,000.00 \times 7.5\% \times \frac{1}{12} = \562.50 interest

STEP 2: Find the payment to principal. $\text{Monthly Payment} - \text{Interest}$
 $\$629.10 - \$562.50 = \$66.60 \text{ payment to principal}$

STEP 3: Find the new principal. $\text{Previous Balance} - \text{Payment to Principal}$
 $\$90,000.00 - \$66.60 = \$89,933.40 \text{ new principal}$

REVIEW EXERCISES

Complete the table below.

	Mortgage Amount	Interest Rate	First Monthly Payment	Amount for Interest	Amount for Principal	New Principal
23.	\$ 60,000	7.0%	\$ 399.00	a.	b.	c.
24.	130,000	5.5%	738.40	a.	b.	c.
25.	145,500	6.0%	873.00	a.	b.	c.
26.	159,900	5.0%	858.66	a.	b.	c.

SECTION OBJECTIVE 10-5 AND EXAMPLES

Calculate the assessed value and real estate taxes.

The Orange County tax assessor stated that the market value of the Marvin Hotel is \$950,000. The rate of assessment in Orange County is 55 percent of market value. The tax rate is 34.50 mills. What is the real estate tax on the Marvin Hotel?

STEP 1: Find the assessed value. **Market Value × Rate of Assessment**

$$\$950,000 \times 55\% = \$522,500 \text{ assessed value}$$

STEP 2: Express the tax rate as a decimal. $34.50 \text{ mills} \div 1,000 = 0.0345 \text{ tax rate}$

STEP 3: Find the real estate tax. **Tax Rate × Assessed Value**

$$0.0345 \times \$522,500.00 = \$18,026.25 \text{ real estate tax}$$

REVIEW EXERCISES

- 27. The tax rate is 54.5 mills, the market value is \$95,000, and the rate of assessment is 45 percent. Find the assessed value, the tax rate as a decimal, and the real estate tax.
- 28. Se Ri Pak's home is located in a town where the rate of assessment is 30 percent of market value. The tax rate is \$43.46 per \$1,000 of assessed value. His home has a market value of \$229,500. What is the assessed value? What is the property tax?
- 29. Harvey and Marie Levan own a home with a market value of \$542,000. The rate of assessment is 60 percent and the tax rate is 24.31 mills. What is the annual real estate tax?
- 30. Steve and Shelia Hitt own a home in a retirement community. The home has a market value of \$87,400. The rate of assessment is 50 percent and the tax rate is \$30.45 per \$1,000 of assessed value. What is their yearly real estate tax?

SECTION OBJECTIVE 10-6 AND EXAMPLES

Work out the amount of coverage.

Use Figure 10.4 on page 357 to answer the problems in this section. The replacement value of Todd and Melissa Dewey's home is \$86,500. They have insured their home for 80 percent of the replacement value. According to the guidelines found in Figure 10.4, what is the amount of coverage on the Deweys' personal property?

STEP 1: Find the amount of coverage on the home. **Replacement Value × Percent**

$$\$86,500 \times 80\% = \$69,200$$

STEP 2: Find the amount of coverage on personal property.

Amount of Coverage on Home × Percent

$$\$69,200 \times 50\% = \$34,600 \text{ coverage on personal property}$$

REVIEW EXERCISES

Find the amount of coverage and the amount of insurance.

	Replacement Value	Percent Covered	Amount of Coverage	Amount of Insurance for Garage
31.	\$124,500	90%	a.	—
32.	65,000	75%	a.	—
33.	250,000	85%	a.	b.
34.	87,000	80%	a.	—

SECTION OBJECTIVE 10-7 AND EXAMPLES

Calculate the annual homeowners insurance premium.

The Cunninghams' wood-frame house. Replacement value of \$150,000. Fire protection class 10. What is the annual premium? (Use Figure 10.5 on page 359 to answer the problem.)

Answer: \$692

REVIEW EXERCISES

Complete the table below. (Use Figure 10.5 on page 359 to answer the problems.)

	Type of Construction	Replacement Value	Percent Covered	Fire Protection Class	Annual Premium
35.	Brick	\$100,000	80%	5	
36.	Brick	100,000	90%	11	
37.	Wood frame	120,000	100%	8	
38.	Wood frame	200,000	75%	10	

SECTION OBJECTIVE 10-8 AND EXAMPLES

Compute the total housing cost and compare it with suggested guidelines.

Peter and Lucy Cole have a combined monthly take-home pay of \$2,550. They keep a record of their monthly housing expenses. The list of expenses for April is shown. Were their housing costs for April within FHA guidelines?

Housing Expenses for April	
Rent payment	\$886.50
Renters insurance	36.00
Gas—heat	54.00
Electricity	108.20
Telephone service	35.50

STEP 1: Find the monthly cost.

$$\$886.50 + \$36.00 + \$54.00 + \$108.20 + \$35.50 = \$1,120.20$$

STEP 2: Find the recommended maximum.

$$\$2,550.00 \times 35\% = \$892.50$$

STEP 3: Compare. Is the total monthly cost less than the recommended maximum?

Is \$1,120.20 less than \$892.50? No, the Coles are not within the guidelines.

REVIEW EXERCISES

Find the recommended FHA maximum. (Round to nearest \$1.)

	Monthly Net Pay	Recommended FHA Maximum
39.	\$2,540	
40.	3,298	
41.	1,298	
42.	5,496	