## sections 10-1 10-2 Mortgage Loans, Monthly SECTIONS 10-1, 2 Payment and Total Interest

When you purchase a home, you will probably make a down payment and finance the remaining portion of the selling price with a mortgage loan from a bank, a savings and loan association, a credit union, or a mortgage company. A mortgage loan is usually repaid with interest in equal monthly payments. 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, the total amount paid, and the interest charged.

Mortgage Loan Amount $=$ Selling Price - Down Payment
Monthly Payment $=\frac{\text { Amount of Mortgage }}{\$ 1,000} \times$ Monthly Payment for a $\$ 1,000$ Loan
Amount Paid $=$ Monthly Payment $\times$ Number Of Payments
Total Interest Charged $=$ Amount Paid - Mortgage Amount

1. Kung and So Lee offered $\$ 87,000$ on a home that had been priced at $\$ 96,500$. The seller agreed to the offer. A 20 percent down payment is required. What is the amount of the down payment? What is the amount of the mortgage loan needed to finance the purchase?
$\qquad$
$\qquad$

| MONTHLY PAYMENT FOR A $\$ 1,000$ LOAN |  |  |  |
| :---: | :---: | :---: | :---: |
| Annual <br> Interest <br> Rate | Length of Loan in Years |  |  |
|  | $\mathbf{2 0}$ | $\mathbf{2 5}$ | $\mathbf{3 0}$ |
| $5.00 \%$ | $\$ 6.60$ | $\$ 5.85$ | $\$ 5.37$ |
| $5.50 \%$ | 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 |

2. Mary Cunningham offered $\$ 156,500$ for a home that had been priced at $\$ 169,500$. The seller agreed to the offer. A bank is willing to finance the purchase if she can make a down payment of 20 percent. What is the amount of the mortgage loan?
3. Danelle and Jim Baraka have obtained a $\$ 70,000$ mortgage loan at an annual interest rate of 8.00 percent for 30 years.
a. What is the monthly payment?
b. What is the total amount paid?
c. What is the total interest?
4. Lee Hays has obtained a $\$ 240,000$ mortgage loan at 7.00 percent interest for 25 years.
a. What is the monthly payment?
b. What is the total amount paid?
c. What is the total interest?
5. How much can be saved in total interest by financing $\$ 120,000$ at 7.50 percent for 20 years rather than 25 years?
6. How much can be saved in total interest by financing $\$ 120,000$ at 8.00 percent for 25 years rather than 8.50 percent interest for 25 years?
