## Section 6.3

## Home Mortgage In Exercises 13-17, use the information below.

You take out a home mortgage for $\$ 170,000$ for 30 years at $5 \%$. The regular monthly payment is $\$ 912.60$.

13. Compare the total interest you pay to the total interest of a home mortgage for $\$ 170,000$ for 30 years at $7 \%$.
14. Compare the total interest you pay to the total interest of a home mortgage for $\$ 170,000$ for 15 years at $5 \%$.
15. Each month, you make the regular payment of $\$ 912.60$ plus an additional $\$ 50$.
a. How much sooner do you pay off the mortgage?
b. How much do you save in interest?
16. The monthly payment for a 5 -year balloon mortgage for $\$ 170,000$ is equal to that of a 30 -year mortgage with an annual percentage rate of $5 \%$. Find the balloon payment and the total interest that you pay.
17. After 5 years, you move to a different state and sell the house for $\$ 253,350$.

## Expenses and Savings Related to Buying

Cost of home: \$205,000
Down payment: $\$ 35,000$
Mortgage: $\$ 170,000$
Monthly payment: \$912.60
Closing costs: 5\% of cost of home

Realtor's fee: 5\% of cost of home Home insurance: \$1000 per year
Property tax: $1.5 \%$ of cost of home per year Home repairs: $\$ 10,000$
Income tax savings (interest): $\$ 8000$

Compare the costs of buying the home and renting a comparable home for $\$ 1200$ per month. Assume that if you did not buy the home, you could have invested the down payment and earned $\$ 8000$ in interest.
18. Housing Bubble Describe what happens to the prices of homes during a bubble. What happens when the bubble bursts?

