

# Chapter 4 Review Exercises

## Section 4.1

**DATA** **Apportionment** In Exercises 1–6, use the information below.

Apportionment is the proportional distribution of the 435 members of the U.S. House of Representatives based on the population of each state. In 1960, each member of the House represented about 415,000 people. On average, this number has increased by 11.5% each decade.

- Write a formula that can be used to model the exponential growth of the population per representative every decade since 1960. (*Note: n represents decades.*)
- Make a table showing the estimated population per representative every decade from 1960 through 2010.
- Use the formula from Exercise 1 to project the population per representative every decade from 2020 through 2100.
- Graph the estimated and projected populations from Exercises 2 and 3.
- Suppose the actual populations per representative for 2050 and 2060 are 1,100,000 and 1,230,000, respectively. What is the rate of growth per decade? How do these numbers compare to your model?
- Use the map to estimate the population of California.

