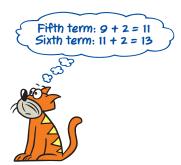
## Key Concept and Vocabulary —

A **sequence** is a series of numbers. Each number in a sequence is called a **term**. You can identify patterns to find missing terms of a sequence.





## PRACTICE MAKES PURR-FECT™

— Check your answers at BigIdeasMath.com. —

Find the sixth term of the sequence.

**4.** 9, 3, 1, 
$$\frac{1}{3}$$
, ...  $\frac{1}{27}$ 

Find the tenth term of the sequence.

**7.** 256, 128, 64, 32, ... 
$$\frac{1}{2}$$

**6.** 
$$\frac{1}{2}, \frac{3}{2}, \frac{5}{2}, \frac{7}{2}, \dots$$
  $\frac{19}{2}$ 

8. 
$$\frac{1}{25}$$
,  $\frac{1}{5}$ , 1, 5, ... 78,125

**9. PAY RATE** Your boss pays you \$0.03 the first day you work, \$0.06 the second day, \$0.12 the third day, \$0.24 the fourth day, and so on. How much do you earn on the seventh day? fourteenth day?

\$1.92; \$245.76

**10. BACTERIA** The table shows the number of bacteria in a sample for consecutive hours. Write the first eight terms of the sequence for the population. Interpret the eighth term.

Time	1 р.м.	2 р.м.	3 р.м.	4 р.м.
Bacteria	10	100	1000	10,000