



## Additional Practice 1-3

### Decimals to Thousandths

#### Another Look!

Patterns can help you read and write decimals.

Decimal	Fraction	Number Name
0.1	$\frac{1}{10}$	One tenth
0.01	$\frac{1}{100}$	One hundredth
0.001	$\frac{1}{1,000}$	One thousandth

0.01 is 10 times as great as 0.001.

0.01 is  $\frac{1}{10}$  as great as 0.1.

0.1 is 10 times as great as 0.01.

The value of each place-value position is 10 times the value of the place to its right and  $\frac{1}{10}$  the value of the place to its left.



1. 0.08 is 10 times as great as 0.008.

2. 0.002 is  $\frac{1}{10}$  of 0.02.

3. 0.5 is 10 times as great as 0.05.

4. 0.07 is  $\frac{1}{10}$  of 0.7.

In **5–12**, write each decimal as a fraction.

5. 0.009  $\frac{9}{1,000}$

6. 0.105  $\frac{105}{1,000}$

7. 0.2  $\frac{2}{10}$

8. 0.025  $\frac{25}{1,000}$

9. 0.563  $\frac{563}{1,000}$

10. 0.31  $\frac{31}{100}$

11. 0.6  $\frac{6}{10}$

12. 0.004  $\frac{4}{1,000}$

In **13–20**, write each fraction as a decimal.

13.  $\frac{8}{1,000}$  0.008

14.  $\frac{63}{100}$  0.63

15.  $\frac{984}{1,000}$  0.984

16.  $\frac{29}{1,000}$  0.029

17.  $\frac{111}{1,000}$  0.111

18.  $\frac{3}{10}$  0.3

19.  $\frac{6}{1,000}$  0.006

20.  $\frac{5}{1,000}$  0.005



- 21. Number Sense** Tommy is beginning a science experiment in the lab. The instructions call for 0.322 kilogram of potassium. Write 0.322 as a fraction.

$$\frac{322}{1,000}$$

- 22.** Mt. McKinley is the highest mountain peak in North America with an elevation of 20,320 feet. What is the value of the digit 3 in 20,320?

**300**

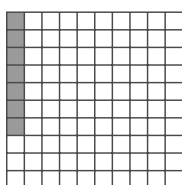
- 23. Construct Arguments** Jorge said that 0.029 can be written as  $\frac{29}{100}$ . Is he correct? Explain.

**No; 0.029 is 29 thousandths, which is equivalent to the fraction  $\frac{29}{1,000}$ .**

- 24.** The area of the continent of North America is about 9,540,000 square miles. Write 9,540,000 in expanded form using exponents to show powers of 10.

$$(9 \times 10^6) + (5 \times 10^5) + (4 \times 10^4)$$

- 25.** What part of the entire square is shaded? Write your answer as a fraction and as a decimal.



$$\frac{7}{100}; 0.07$$

- 26. Higher Order Thinking** Write the fractions  $\frac{5}{10}$ ,  $\frac{5}{100}$ , and  $\frac{5}{1,000}$  as decimals. How are the decimals related?

**0.5, 0.05, 0.005; Sample answer: 0.5 is 10 times as great as 0.05. 0.05 is 10 times as great as 0.005**

- 27. Vocabulary** Complete the sentence using one of the words below.

**power base exponent**

The number 1,000,000 is a(n) **power** of 10.

- 28. Algebra** In three months, Harold watched a total of 40 movies. If he watched 12 movies in June and 13 movies in July, how many movies did he watch in August? Write an equation using the variable  $a$  to model your work.

**15 movies; Sample equation:  $40 = 12 + 13 + a$**



### Assessment Practice

- 29.** 0.003 is  $\frac{1}{10}$  of which decimal?

- (A) 0.3  
(B) 0.03  
(C) 0.33  
(D) 0.333

- 30.** 0.8 is 10 times as great as which decimal?

- (A) 0.08  
(B) 0.88  
(C) 0.008  
(D) 0.888