

Name: \_\_\_\_\_ Date: \_\_\_\_\_



**Convert each number from scientific notation to real.**

(1)  $8.467 \times 10^{-3}$

(6)  $2.627 \times 10^3$

(2)  $5.329 \times 10^5$

(7)  $4.881 \times 10^{-5}$

(3)  $4.857 \times 10^{-5}$

(8)  $3.491 \times 10^{-5}$

(4)  $8.384 \times 10^{-3}$

(9)  $6.692 \times 10^{-1}$

(5)  $1.632 \times 10^6$

(10)  $1.433 \times 10^{-4}$



**Convert each number from real to scientific notation.**

(11) 3,915,000

(17) 5.185

(12) 0.000001474

(18) 0.00006566

(13) 0.6391

(19) 62,390

(14) 1.885

(20) 9,843,000

(15) 0.0006447

(21) 0.05765

(16) 0.6464

(22) 0.005532

# READY TO GO ON?

SECTION 1A

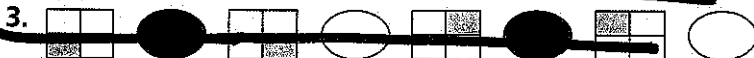
## Quiz for Lessons 1-1 Through 1-6

### 1-1 Numbers and Patterns

Identify a possible pattern. Use the pattern to write the next three numbers or figures.

1. 8, 15, 22, 29, ...

2. 79, 66, 53, 40, ...



### 1-2 Exponents

Find each value.

4.  $8^4$

5.  $7^3$

6.  $4^5$

7.  $6^2$

8. The number of bacteria in a sample doubles every hour. How many bacteria cells will there be after 8 hours if there is one cell at the beginning? Write your answer as a power.

### 1-3 Metric Measurements

Convert each measure.

9. 17.3 kg to grams

10. 540 mL to liters

11. 0.46 cm to millimeters

12. Cat ran in the 400-meter dash and the 800-meter run. Hilo ran in the 2-kilometer cross-country race. All together, who ran the farthest, Cat or Hilo?

### 1-4 Applying Exponents

Multiply.

13.  $456 \cdot 10^5$

14.  $9.3 \cdot 10^2$

15.  $0.36 \cdot 10^8$

Write each number in scientific notation.

16. 8,400,000

17. 521,000,000

18. 29,000

19. In May 2005, the world's population was over 6,446,000,000 and was increasing by 140 people each minute! Write this population in scientific notation.

### 1-5 Order of Operations

Simplify each expression.

20.  $8 - 14 \div (9 - 2)$

21.  $54 - 6 \cdot 3 + 4^2$

22.  $4 - 24 \div 2^3$

23.  $4(3 + 2)^2 - 9$

### 1-6 Properties

Simplify each expression. Justify each step.

24.  $29 + 50 + 21$

25.  $5 \cdot 18 \cdot 20$

26.  $34 + 62 + 36$

27.  $3 \cdot 11 \cdot 20$