

## 2-10

## Skills Practice

## Scientific Notation

Write each number in standard form.

1.  $6.7 \times 10^1 = 67$

2.  $6.1 \times 10^4 = 61,000$

~~6,1000~~

3.  $1.6 \times 10^3 = 1,600$

~~1,600~~

4.  $3.46 \times 10^2 = 346$

~~3.46~~

5.  $2.91 \times 10^5 = 291,000$

~~291,000~~

6.  $8.651 \times 10^7 = 86,510,000$

~~86,510,000~~

7.  $3.35 \times 10^{-1} = .335$

8.  $7.3 \times 10^{-6} = .0000073$

~~.0000073~~

9.  $1.49 \times 10^{-7} = .000000149$

~~.000000149~~

10.  $4.0027 \times 10^{-4} = .00040027$

~~.0004,0027~~

11.  $5.2277 \times 10^{-3} = .0052277$

~~.005,2277~~

12.  $8.50284 \times 10^{-2} = .0850284$

~~.08,50284~~

Write each number in scientific notation.

13. 34

$3.4 \times 10^1$

14. 273

$2.73 \times 10^2$

15. 79,700

$7.97 \times 10^4$

16. 6,590

$6.59 \times 10^3$

17. 4,733,800

$4.7338 \times 10^6$

18. 2,204,000,000

$2.204 \times 10^9$

19. 0.00916

$9.16 \times 10^{-3}$

20. 0.29

$2.9 \times 10^{-1}$

21. 0.00000571

$5.71 \times 10^{-6}$

22. 0.0008331

$8.331 \times 10^{-4}$

23. 0.0121

$1.21 \times 10^{-2}$

24. 0.00000018

$1.8 \times 10^{-7}$

**2-10****Word Problem Practice****Scientific Notation**

1. **MEASUREMENT** There are about 25.4 millimeters in one inch. Write this number in scientific notation.

$$2.54 \times 10^1$$

2. **POPULATION** In the year 2000, the population of Rahway, New Jersey, was 26,500. Write this number in scientific notation.

$$2.65 \times 10^4$$

3. **MEASUREMENT** There are 5,280 feet in one mile. Write this number in scientific notation.

$$5.28 \times 10^3$$

4. **PHYSICS** The speed of light is about  $1.86 \times 10^5$  miles per second. Write this number in standard notation.

$$1,860,000$$

$$186,000$$

5. **COMPUTERS** A CD can store about 650,000,000 bytes of data. Write this number in scientific notation.

$$6.5 \times 10^8$$

6. **SPACE** The diameter of the Sun is about  $1.39 \times 10^9$  meters. Write this number in standard notation.

$$1,390,000,000$$

$$1,390,000,000$$

7. **ECONOMICS** The U.S. Gross Domestic Product in the year 2004 was  $1.17 \times 10^{13}$  dollars. Write this number in standard notation.

$$11,700,000,000,000$$

$$11,700,000,000,000$$

8. **MASS** The mass of planet Earth is about  $5.98 \times 10^{24}$  kilograms. Write this number in standard notation.

$$5,980,000,000,000,000,000,000,000$$

$$5,980,000,000,000,000,000,000,000$$