

**10.5**

**Practice**  
For use after Lesson 10.5

Tell whether the number is written in scientific notation. Explain.

- 1.  $14 \times 10^8$   
NO, because 14 is greater than 10
- 2.  $2.6 \times 10^{12}$   
↑ YES  
between 1 → 9.99  
Power of 10
- 3.  $4.79 \times 10^{-8}$  ← Power of 10  
↑ YES  
1 → 9.99
- 4.  $3.99 \times 10^{16}$   
YES
- 5.  $0.15 \times 10^{22}$   
↑ NO  
should be between 1 → 9.99
- 6.  $6 \times 10^3$   
YES

Write the number in standard form.

- 7.  $4 \times 10^9$   
4,000,000,000
- 8.  $2 \times 10^{-5}$   
0.00002
- 9.  $3.7 \times 10^6$   
3,700,000
- 10.  $4.12 \times 10^{-3}$   
0.00412
- 11.  $7.62 \times 10^{10}$   
76,200,000,000
- 12.  $9.908 \times 10^{-12}$   
0.000000000009908

13. Light travels at  $3 \times 10^8$  meters per second.

a. Write the speed of light in standard form.

$3 \times 10^8$   
300,000,000 meters per second

b. How far has light traveled after 5 seconds?

$300,000,000 \times 5$   
1,500,000,000 meters