

## **Reteaching 4-9 Scientific Notation**

Write each number in scientific notation, then multiply.  $(8,600,000)(0.0042)$

8.6 is between 1  
and 10

$$8,600,000. = 8.6 \times 10^6$$

6 places  
to the left

4.2 is between 1  
and 10

$$0.0042 = 4.2 \times 10^{-3}$$

3 places  
to the right

$$\begin{aligned} (8.6 \times 10^6)(4.2 \times 10^{-3}) &= 8.6 \times 4.2 \times 10^6 \times 10^{-3} \\ &= 36.12 \times 10^6 \times 10^{-3} \\ &= 36.12 \times 10^3 \\ &= 3.612 \times 10^1 \times 10^3 \\ &= 3.612 \times 10^4 \end{aligned}$$

Use the commutative property of multiplication.

Multiply 8.6 and 4.2.

Add the exponents.

Write 36.12 as  $3.612 \times 10^1$ .

Add the exponents.

### **Write each number in scientific notation**

1. 745 million \_\_\_\_\_      2. 0.00034 \_\_\_\_\_
3. 888,200,000 \_\_\_\_\_      4. 5,700 \_\_\_\_\_

### **Multiply. Write your result using scientific notation.**

5.  $(1.6 \times 10^6)(3.7 \times 10^4)$  \_\_\_\_\_
6.  $(3 \times 10^{-4})(2 \times 10^{-5})$  \_\_\_\_\_
7.  $72,000 \times 143,000$  \_\_\_\_\_
8.  $(2.3 \times 10^{-2})(1.5 \times 10^4)$  \_\_\_\_\_