

## Worksheet 1-7 B

Evaluate each expression. Express the result in scientific notation. (Examples 1 and 2)

1.  $(3.9 \times 10^2)(2.3 \times 10^6) =$  \_\_\_\_\_

2.  $(4.18 \times 10^{-4})(9 \times 10^{-4}) =$  \_\_\_\_\_

Show  
your  
work.

3.  $(9.75 \times 10^3)(8.4 \times 10^{-6}) =$  \_\_\_\_\_

4.  $\frac{9.45 \times 10^{10}}{1.5 \times 10^6} =$  \_\_\_\_\_

5.  $\frac{1.14 \times 10^6}{4.8 \times 10^{-6}} =$  \_\_\_\_\_

6.  $\frac{9 \times 10^{-11}}{2.4 \times 10^8} =$  \_\_\_\_\_

7. **STEM** Neurons are cells in the nervous system that process and transmit information. An average neuron is about  $5 \times 10^{-6}$  meter in diameter. A standard table tennis ball is 0.04 meter in diameter. About how many times as great is the diameter of a ball than a neuron? (Example 2)
- \_\_\_\_\_
- \_\_\_\_\_



Evaluate each expression. Express the result in scientific notation.

(Examples 3–5)

8.  $(9.5 \times 10^{11}) + (6.3 \times 10^9) =$  \_\_\_\_\_

9.  $(1.03 \times 10^9) - (4.7 \times 10^7) =$  \_\_\_\_\_

10.  $(1.357 \times 10^9) + 590,000 =$  \_\_\_\_\_

11.  $87,100 - (6.34 \times 10^1) =$  \_\_\_\_\_