

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Score: \_\_\_\_\_/\_\_\_\_\_ = \_\_\_\_\_% = \_\_\_\_\_

## **HW 6-3 - Multiply & Divide with Scientific Notation**

Write the number in scientific notation.

1. 89,000

3. 78,900,000

2. 0.00002007

4. 0.000001

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Evaluate each expression. Express the result in scientific notation.

5.  $(3.9 \times 10^2)(2.3 \times 10^6)$

6.  $(4.18 \times 10^{-4})(9 \times 10^{-4})$

7.  $(9.75 \times 10^3)(8.4 \times 10^{-6})$

8.  $\frac{9.45 \times 10^{10}}{1.5 \times 10^6}$

Evaluate each expression. Express the result in scientific notation.

9.  $\frac{1.14 \times 10^6}{4.8 \times 10^{-6}}$

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

Evaluate each expression. Express the result in scientific notation.

11.  $(3.7 \times 10^{-2})(1.2 \times 10^3)$

12.  $\frac{3.24 \times 10^{-4}}{8.1 \times 10^{-7}}$

13. Convert the following to scientific notation and identify the expression that does not belong.

$14.28 \times 10^9$

$(3.4 \times 10^6)(4.2 \times 10^3)$

$1.4 \times 10^9$

$(3.4)(4.2) \times 10^{(6+3)}$

Review:

Evaluate each expression. Express the result in scientific notation.

14.  $(5.8 \times 10^5)(6.4 \times 10^2)$

15.  $(3.92 \times 10^6)(2.2 \times 10^4)$

16.  $\frac{2.952 \times 10^5}{3.6 \times 10^3}$

17.  $\frac{2.052 \times 10^7}{5.4 \times 10^4}$

18.  $(6.9 \times 10^7)(2.12 \times 10^5)$

19.  $(1.78 \times 10^4) + (5.35 \times 10^3)$

20.  $(8.4 \times 10^7) - (6.3 \times 10^6)$

21.  $(9.62 \times 10^5) - (2.58 \times 10^3)$