HW 6-3: Multiply & Divide with Sci. Notation

Write the number in scientific notation.

1. 89,000

3. 78,900,000

2. 0.00002007

4. 0.000001

Evaluate each expression. Express the result in scientific notation.

5. $\left(3.9 \times 10^{2}\right)\left(2.3 \times 10^{6}\right)$

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

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

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

Evaluate each expression. Express the result in scientific notation.

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

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

Evaluate each expression. Express the result in scientific notation.

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

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

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

14.28×10^{9}	$\left(3.4 \times 10^{6}\right)\left(4.2 \times 10^{3}\right)$	1.4×10^{9}	$(3.4)(4.2) \times 10^{(6+3)}$

Review:
Evaluate each expression. Express the result in scientific notation.

14. $\left(5.8 \times 10^{5}\right)\left(6.4 \times 10^{2}\right)$

15. $\left(3.92 \times 10^{6}\right)\left(2.2 \times 10^{4}\right)$

20. $\dfrac{2.952 \times 10^{5}}{3.6 \times 10^{3}}$

21. $\dfrac{2.052 \times 10^{7}}{5.4 \times 10^{4}}$

22. $\left(6.9 \times 10^{7}\right)\left(2.12 \times 10^{5}\right)$

23. $\left(1.78 \times 10^{4}\right) + \left(5.35 \times 10^{3}\right)$

24. $\left(8.4 \times 10^{7}\right) - \left(6.3 \times 10^{6}\right)$

25. $\left(9.62 \times 10^{5}\right) - \left(2.58 \times 10^{3}\right)$