

Review of [1-10] Operations in Scientific Notation

1. Perform the following operations and express the answers in scientific notation.

a. $(1.2 \times 10^5) + (5.35 \times 10^6)$

$$0.12 \times 10^6 + 5.35 \times 10^6 = \boxed{5.47 \times 10^6}$$

b. $(6.91 \times 10^{-2}) + (2.4 \times 10^{-3})$

$$6.91 \times 10^{-2} + 0.24 \times 10^{-2} = \boxed{7.15 \times 10^{-2}}$$

c. $(9.70 \times 10^6) + (8.3 \times 10^5)$

$$9.7 \times 10^6 + 0.83 \times 10^6 = \boxed{10.53 \times 10^6}$$

$$\boxed{1.053 \times 10^7}$$

d. $(3.67 \times 10^2) - (1.6 \times 10^1)$

$$3.67 \times 10^2 - 0.16 \times 10^2 = \boxed{3.51 \times 10^2}$$

e. $(8.41 \times 10^{-5}) - (7.9 \times 10^{-6})$

$$8.41 \times 10^{-5} - 0.79 \times 10^{-5} = \boxed{7.62 \times 10^{-5}}$$

f. $(1.33 \times 10^5) - (4.9 \times 10^4)$

$$1.33 \times 10^5 - 0.49 \times 10^5 = \boxed{0.84 \times 10^5}$$

$$\boxed{8.4 \times 10^4}$$

2. Perform the following operations and express the answers in scientific notation.

a. $(4.3 \times 10^8) \times (2.0 \times 10^6)$

$$\boxed{8.6 \times 10^{14}}$$

b. $(6.0 \times 10^3) \times (1.5 \times 10^{-2})$

$$\boxed{9 \times 10^1}$$

c. $(1.5 \times 10^{-2}) \times (8.0 \times 10^{-1})$

$$\boxed{12 \times 10^{-3}}$$

d. $\frac{7.8 \times 10^3}{1.2 \times 10^4}$

$$\boxed{6.5 \times 10^{-1}}$$

e. $\frac{8.1 \times 10^{-2}}{9.0 \times 10^2}$

$$0.9 \times 10^{-4}$$

$$\boxed{9 \times 10^{-5}}$$

$$\begin{array}{r} 91 \\ 24 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 8.41 \\ -0.79 \\ \hline 7.62 \end{array}$$

$$\begin{array}{r} 1.33 \\ -0.49 \\ \hline .84 \end{array}$$