

4.5 Quiz Review

$$(4.3 \times 10^8)(2 \times 10^6)$$

Evaluate. Write each answer in (a) scientific notation & (b) standard notation.

(a)
$$\begin{array}{r} 4.3 \\ \times 2 \\ \hline 8.6 \end{array} \quad 8.6 \times 10^{14}$$

(b)
$$860,000,000,000,000$$

$$(6 \times 10^3)(1.5 \times 10^2)$$

Evaluate. Write each answer in (a) scientific notation & (b) standard notation.

(a)
$$\begin{array}{r} 3 \quad 15 \\ 6 \\ \times 1.5 \\ \hline 9.0 \end{array} \quad 9.0 \times 10^5$$

(b)
$$900,000 \quad 900,000$$

$$(1.5 \times 10^{-2}) (8 \times 10^{-1})$$

$$\textcircled{a} \begin{array}{r} 1.5 \\ \times 8 \\ \hline 12.0 \end{array}$$

$$12.0 \times 10^{-3}$$

$$1.2 \times 10^1 \times 10^{-3}$$

$$1.2 \times 10^{-2}$$

$$\textcircled{b} \underbrace{0.012} \Rightarrow 0.012$$

Evaluate. Write each answer in (a) scientific notation & (b) standard notation.

$$(2.4 \times 10^4) (1.8 \times 10^{-2})$$

$$\textcircled{a} \begin{array}{r} 24 \\ \times 18 \\ \hline 192 \\ 240 \\ \hline 432 \end{array}$$

$$4.32 \times 10^2$$

$$\textcircled{b} \underbrace{4032} \Rightarrow 432$$

Evaluate. Write each answer in (a) scientific notation & (b) standard notation.

$$\frac{9 \times 10^4}{3 \times 10^2}$$

Evaluate. Write each answer in (a) scientific notation & (b) standard notation.

(a) $9 \div 3$

$$\begin{array}{r} 3 \overline{)9} \\ \underline{-9} \\ \end{array}$$

$$3 \times 10^2$$

(b) 300

$$300$$

$$\frac{7.5 \times 10^5}{2.5 \times 10^3}$$

Evaluate. Write each answer in (a) scientific notation & (b) standard notation.

(a) $7.5 \div 2.5$

$$\begin{array}{r} 2.5 \overline{)7.5} \\ \underline{-7.5} \\ \end{array}$$

$$3 \times 10^2$$

$$\begin{array}{r} 3 \overline{)75} \\ \underline{-75} \\ \end{array}$$

(b) $300 = 300$

$$\frac{4.5 \times 10^3}{2 \times 10^6}$$

$3 - 6 = 3 + -6$

Evaluate. Write each answer in (a) scientific notation & (b) standard notation.

(a) $4.5 \div 2$

$$2 \overline{) 4.50}$$

$$\begin{array}{r} 2.25 \\ 2 \overline{) 4.50} \\ \underline{-4} \\ 05 \\ \underline{-4} \\ 10 \\ \underline{-10} \\ 0 \end{array}$$

2.25×10^{-3}

(b) $.002025 \Rightarrow 0.00225$

$$\frac{8.1 \times 10^{-2}}{9 \times 10^2}$$

$-2 - 2 = -2 + -2$

Evaluate. Write each answer in (a) scientific notation & (b) standard notation.

(a) $8.1 \div 9$

$$9 \overline{) 8.1}$$

$$\begin{array}{r} .9 \\ 9 \overline{) 8.1} \\ \underline{-8.1} \\ 0 \end{array}$$

0.9×10^{-4}

$9 \times 10^{-1} \times 10^{-4}$

9×10^{-5}

(b) $.00009 = 0.00009$