

CHAPTER 2: OPERATION ON NUMBER

CHECK POINT 3.

$$\begin{aligned} \text{a. } (8 \times 10^3) \times (3.5 \times 10^3) \\ &= (8 \times 3.5) \times (10^{3+3}) \\ &= 28 \times 10^6 \end{aligned}$$

$$\begin{aligned} \text{b. } (4.5 \times 10^0) \div (3 \times 10^1) \\ &= \left(\frac{4.5}{3}\right) \times 10^{0-1} \\ &= 1.5 \times 10^{-1} \end{aligned}$$

$$\begin{aligned} \text{c. } (8 \times 10^1) \times (6 \times 10^5) \\ &= (8 \times 6) \times (10^{1+5}) \\ &= 48 \times 10^6 = 4.8 \times 10^1 \times 10^6 \\ &= 4.8 \times 10^7 \end{aligned}$$

$$\begin{aligned} \text{d. } (2.5 \times 10^1) \div (2.5 \times 10^1) \\ &= \left(\frac{2.5}{2.5}\right) \times 10^{1-1} \\ &= 1 \times 10^0 = 1 \times 1 = 1 \end{aligned}$$

$$\begin{aligned} \text{e. } (5 \times 10^{-2}) \div (1 \times 10^2) \\ &= \left(\frac{5}{1}\right) \times 10^{-2-2} \\ &= 5 \times 10^{-4} \end{aligned}$$

$$\begin{aligned} \text{f. } (5 \times 10^{-2}) \div (5 \times 10^1) \\ &= \left(\frac{5}{5}\right) \times 10^{-2-1} \\ &= 1 \times 10^{-3} \end{aligned}$$

$$\begin{aligned} \text{g. } (3 \times 10^{-6}) \times (5 \times 10^4) \\ &= (3 \times 5) \times (10^{-6+4}) \\ &= 15 \times 10^{-2} \\ &= 1.5 \times 10^1 \times 10^{-2} \\ &= 1.5 \times 10^{-1} \end{aligned}$$

$$\begin{aligned} \text{h. } (1.5 \times 10^4) \div (1 \times 10^6) \\ &= \left(\frac{1.5}{1}\right) \times 10^{4-6} \\ &= 1.5 \times 10^{-2} \end{aligned}$$

$$\begin{aligned} \text{i. } (1.5 \times 10^{-5}) \div (3 \times 10^6) \\ &= \left(\frac{1.5}{3}\right) \times 10^{-5-6} \\ &= 0.5 \times 10^{-11} \\ &= 5 \times 10^{-1} \times 10^{-11} \\ &= 5 \times 10^{-12} \end{aligned}$$

Checked
12/9/18.

Remember
Standard form
between 1-10