



Exercise 3C

(xii) First, we will multiply 1245 by 64.

$$\begin{array}{r} 1245 \\ \times 64 \\ \hline 4980 \\ 7470 \times \\ \hline 79680 \end{array}$$

$$\therefore 1245 \times 64 = 79680$$

Sum of decimal places in the given numbers = $(3 + 1) = 4$

$$\begin{aligned} \therefore 1.245 \times 6.4 &= 7.9680 \quad [4 \text{ places of decimal}] \\ &= 7.968 \end{aligned}$$

Q6

Answer :

(i) First, we will find the product $13 \times 1.3 \times 0.13$.

$$\begin{aligned} \text{Now, } 13 \times 13 \times 13 &= 169 \times 13 \\ &= 2197 \end{aligned}$$

$$\begin{array}{r} 169 \\ \times 13 \\ \hline 507 \\ 169 \times \\ \hline 2197 \end{array}$$

Sum of decimal places in the given numbers = $(1 + 2) = 3$

So, the product must have three decimal places.

$$\therefore 13 \times 1.3 \times 0.13 = 2.197$$

(ii) First, we will find the product $2.4 \times 1.5 \times 2.5$.

$$\begin{aligned} \text{Now, } 24 \times 15 \times 25 &= 360 \times 25 \\ &= 9000 \end{aligned}$$

$$\begin{array}{r}
 360 \\
 \times 25 \\
 \hline
 1800 \\
 720 \times \\
 \hline
 9000
 \end{array}$$

Sum of decimal places in the given numbers = $(1 + 1 + 1) = 3$

So, the product must have three decimal places.

$$\begin{aligned}
 \therefore 2.4 \times 1.5 \times 2.5 &= 9.000 \\
 &= 9
 \end{aligned}$$

(iii) First, we will find the product $0.8 \times 3.5 \times 0.05$.

$$\begin{aligned}
 \text{Now, } 8 \times 35 \times 5 &= 280 \times 5 \\
 &= 1400
 \end{aligned}$$

$$\begin{array}{r}
 280 \\
 \times 5 \\
 \hline
 1400
 \end{array}$$

Sum of decimal places in the given numbers = $(1 + 1 + 2) = 4$

So, the product must have four decimal places.

$$\begin{aligned}
 \therefore 0.8 \times 3.5 \times 0.05 &= 0.1400 \\
 &= 0.14
 \end{aligned}$$

(iv) First, we will find the product $0.2 \times 0.02 \times 0.002$.

$$\begin{aligned}
 \text{Now, } 2 \times 2 \times 2 &= 4 \times 2 \\
 &= 8
 \end{aligned}$$

Sum of decimal places in the given numbers = $(1 + 2 + 3) = 6$

So, the product must have six decimal places.

$$\therefore 0.2 \times 0.02 \times 0.002 = 0.000008$$

(v) First, we will find the product $11.1 \times 1.1 \times 0.11$.

$$\text{Now, } 111 \times 11 \times 11 = 1221 \times 11$$

***** END *****