



Operations on Whole Numbers Ex 4.3 Q1

Answer :

(i) $785 \times 0 = \underline{0}$

(ii) $4567 \times 1 = \underline{4567}$ (Multiplicative identity)

(iii) $475 \times 129 = 129 \times \underline{475}$ (Commutativity)

(iv) $\underline{1243} \times 8975 = 8975 \times 1243$ (Commutativity)

(v) $10 \times 100 \times \underline{10} = 10000$

(vi) $27 \times 18 = 27 \times 9 + 27 \times \underline{4} + 27 \times 5$

(vii) $12 \times 45 = 12 \times 50 - 12 \times \underline{5}$

(viii) $78 \times 89 = 78 \times 100 - 78 \times \underline{16} + 78 \times 5$

(ix) $66 \times 85 = 66 \times 90 - 66 \times \underline{4} - 66$

(x) $49 \times 66 + 49 \times 34 = 49 \times (\underline{66} + \underline{34})$

Operations on Whole Numbers Ex 4.3 Q2

Answer :

$$\begin{aligned} \text{(i)} \quad & 2 \times 1497 \times 50 \\ & = (2 \times 50) \times 1497 = 100 \times 1497 = 149700 \end{aligned}$$

$$\begin{aligned} \text{(ii)} \quad & 4 \times 358 \times 25 \\ & = (4 \times 25) \times 358 = 100 \times 358 = 35800 \end{aligned}$$

$$\begin{aligned} \text{(iii)} \quad & 495 \times 625 \times 16 \\ & = (625 \times 16) \times 495 = 10000 \times 495 = 4950000 \end{aligned}$$

$$\begin{aligned} \text{(iv)} \quad & 625 \times 20 \times 8 \times 50 \\ & = (625 \times 8) \times (20 \times 50) = 5000 \times 1000 = 5000000 \end{aligned}$$

Operations on Whole Numbers Ex 4.3 Q3

Answer :

$$\begin{aligned} \text{(i)} \quad & 736 \times 103 \\ & = 736 \times (100 + 3) \\ & \text{{Using distributivity of multiplication over addition of whole numbers}} \\ & = (736 \times 100) + (736 \times 3) \\ & = 73600 + 2208 = 75808 \end{aligned}$$

$$\begin{aligned} \text{(ii)} \quad & 258 \times 1008 \\ & = 258 \times (1000 + 8) \\ & \text{{Using distributivity of multiplication over addition of whole numbers}} \\ & = (258 \times 1000) + (258 \times 8) \\ & = 258000 + 2064 = 260064 \end{aligned}$$

$$\begin{aligned} \text{(iii)} \quad & 258 \times 1008 \\ & = 258 \times (1000 + 8) \\ & \text{{Using distributivity of multiplication over addition of whole numbers}} \\ & = (258 \times 1000) + (258 \times 8) \\ & = 258000 + 2064 = 260064 \end{aligned}$$

Operations on Whole Numbers Ex 4.3 Q4

Answer :

(i) 736×93

$\therefore 93 = (100 - 7)$

$\therefore 736 \times (100 - 7)$

$= (736 \times 100) - (736 \times 7)$

(Using distributivity of multiplication over subtraction of whole numbers)

$= 73600 - 5152 = 68448$

(ii) 816×745

$\therefore 745 = (750 - 5)$

$\therefore 816 \times (750 - 5)$

$= (816 \times 750) - (816 \times 5)$

(Using distributivity of multiplication over subtraction of whole numbers)

$= 612000 - 4080 = 607920$

(iii) 2032×613

$\therefore 613 = (600 + 13)$

$\therefore 2032 \times (600 + 13)$

$= (2032 \times 600) + (2032 \times 13)$

$= 1219200 + 26416 = 1245616$

***** END *****