



Operations on Whole Numbers Ex 4.3 Q5

Answer :

$$\begin{aligned} \text{(i)} \quad & 493 \times 8 + 493 \times 2 \\ & = 493 \times (8 + 2) \end{aligned}$$

$$\begin{aligned} & \text{(Using distributivity of multiplication over addition of whole numbers)} \\ & = 493 \times 10 = 4930 \end{aligned}$$

$$\begin{aligned} \text{(ii)} \quad & 24579 \times 93 + 7 \times 24579 \\ & = 24579 \times (93 + 7) \end{aligned}$$

$$\begin{aligned} & \text{(Using distributivity of multiplication over addition of whole numbers)} \\ & = 24579 \times 100 = 2457900 \end{aligned}$$

$$\begin{aligned} \text{(iii)} \quad & 1568 \times 184 - 1568 \times 84 \\ & = 1568 \times (184 - 84) \end{aligned}$$

$$\begin{aligned} & \text{(Using distributivity of multiplication over subtraction of whole numbers)} \\ & = 1568 \times 100 = 156800 \end{aligned}$$

$$\begin{aligned} \text{(iv)} \quad & 15625 \times 15625 - 15625 \times 5625 \\ & = 15625 \times (15625 - 5625) \end{aligned}$$

$$\begin{aligned} & \text{(Using distributivity of multiplication over subtraction of whole numbers)} \\ & = 15625 \times 10000 = 156250000 \end{aligned}$$

Operations on Whole Numbers Ex 4.3 Q6

Answer :

$$\text{(i) The largest four-digit number} = 9999$$

$$\text{The smallest three-digit number} = 100$$

$$\begin{aligned} \therefore \text{Product of the smallest three-digit number and the largest four-digit number} &= 9999 \times 100 = \\ & 999900 \end{aligned}$$

$$\text{(ii) The largest five-digit number} = 9999$$

$$\text{The largest number of three digits} = 999$$

$$\therefore \text{Product of the largest three-digit number and the largest five-digit number} = 9999 \times 999$$

$$= 9999 \times (1000 - 1)$$

$$= (9999 \times 1000) - (9999 \times 1)$$

$$1)$$

$$= 9999000 - 9999 =$$

$$9989001$$

Operations on Whole Numbers Ex 4.3 Q7

Answer :

(i) $(500 + 7) (300 - 1) = 507 \times 299 = 299 \times \underline{507}$ (Commutativity)

(ii) $888 + 777 + 555 = 111 (8 + 7 + 5) = 111 \times \underline{20}$ (Distributivity)

(iii) $75 \times 425 = (70 + 5) \times 425 = (70 + 5) (\underline{340} + 85)$

(iv) $89 \times (100 - 2) = 89 \times 98 = 98 \times 89 = 98 \times (100 - \underline{11})$ (Commutativity)

(v) $(15 + 5) (15 - 5) = 20 \times 10 = 200 = 225 - \underline{25}$

(vi) $9 \times (10000 + \underline{974}) = 98766$

***** END *****