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 :

(i) $2 \times 1497 \times 50$

$= (2 \times 50) \times 1497 = 100 \times 1497 = 149700$

(ii) $4 \times 358 \times 25$

$= (4 \times 25) \times 358 = 100 \times 358 = 35800$

(iii) $495 \times 625 \times 16$

$= (625 \times 16) \times 495 = 10000 \times 495 = 4950000$

(iv) $625 \times 20 \times 8 \times 50$

$= (625 \times 8) \times (20 \times 50) = 5000 \times 1000 = 5000000$

Operations on Whole Numbers Ex 4.3 Q3

Answer :

(i) 736×103

$= 736 \times (100 + 3)$

{Using distributivity of multiplication over addition of whole numbers}

$= (736 \times 100) + (736 \times 3)$

$= 73600 + 2208 = 75808$

(ii) 258×1008

$= 258 \times (1000 + 8)$

{Using distributivity of multiplication over addition of whole numbers}

$= (258 \times 1000) + (258 \times 8)$

$= 258000 + 2064 = 260064$

(iii) 258×1008

$= 258 \times (1000 + 8)$

{Using distributivity of multiplication over addition of whole numbers}

$= (258 \times 1000) + (258 \times 8)$

$= 258000 + 2064 = 260064$

Operations on Whole Numbers Ex 4.3 Q4

Answer :

(i) 736 × 93

∵ 93 = (100 − 7)

∴ 736 × (100 − 7)

= (736 × 100) − (736 × 7)

(Using distributivity of multiplication over subtraction of whole numbers)

= 73600 − 5152 = 68448

(ii) 816 × 745

∵ 745 = (750 − 5)

∴ 816 × (750 − 5)

= (816 × 750) − (816 × 5)

(Using distributivity of multiplication over subtraction of whole numbers)

= 612000 − 4080 = 607920

(iii) 2032 × 613

∵ 613 = (600 +13)

∴ 2032 × (600 + 13)

= (2032 × 600) + (2032 × 13)

= 1219200 + 26416 = 1245616

********** END **********