



### Exercise 3D

Q1

**Answer :**

(i)  $246 \times 1 = 246$

(ii)  $1369 \times 0 = 0$

(iii)  $593 \times 188 = 188 \times 593$

(iv)  $286 \times 753 = 753 \times 286$

(v)  $38 \times (91 \times 37) = 91 \times (38 \times 37)$

(vi)  $13 \times 100 \times 1000 = 1300000$

(vii)  $59 \times 66 + 59 \times 34 = 59 \times (66 + 34)$

(viii)  $68 \times 95 = 68 \times 100 - 68 \times 5$

Q2

**Answer :**

(i) Commutative law in multiplication

(ii) Closure property

(iii) Associativity of multiplication

(iv) Multiplicative identity

(v) Property of zero

(vi) Distributive law of multiplication over addition

(vii) Distributive law of multiplication over subtraction

Q3

**Answer :**

$$\begin{aligned} \text{(i)} \quad & 647 \times 13 + 647 \times 7 \\ &= 647 \times (13 + 7) \\ &= 647 \times 20 \\ &= 12940 \end{aligned} \quad \text{(By using distributive property)}$$

$$\begin{aligned} \text{(ii)} \quad & 8759 \times 94 + 8759 \times 6 \\ &= 8759 \times (94 + 6) \\ &= 8759 \times 100 \\ &= 875900 \end{aligned} \quad \text{(By using distributive property)}$$

$$\begin{aligned} \text{(iii)} \quad & 7459 \times 999 + 7459 \\ &= 7459 \times (999 + 1) \\ &= 7459 \times 1000 \\ &= 7459000 \end{aligned} \quad \text{(By using distributive property)}$$

$$\begin{aligned} \text{(iv)} \quad & 9870 \times 561 - 9870 \times 461 \\ &= 9870 \times (561 - 461) \\ &= 9870 \times 100 \\ &= 987000 \end{aligned} \quad \text{(By using distributive property)}$$

$$\begin{aligned} \text{(v)} \quad & 569 \times 17 + 569 \times 13 + 569 \times 70 \\ &= 569 \times (17 + 13 + 70) \\ &= 569 \times 100 \\ &= 56900 \end{aligned} \quad \text{(By using distributive property)}$$

$$\begin{aligned} \text{(vi)} \quad & 16825 \times 16825 - 16825 \times 6825 \\ &= 16825 \times (16825 - 6825) \\ &= 16825 \times 10000 \\ &= 168250000 \end{aligned} \quad \text{(By using distributive property)}$$

Q4

**Answer :**

$$\begin{aligned} \text{(i)} \quad & 2 \times 1658 \times 50 \\ &= (2 \times 50) \times 1658 \\ &= 100 \times 1658 \\ &= 165800 \end{aligned}$$

$$\begin{aligned} & \text{(ii) } 4 \times 927 \times 25 \\ &= (4 \times 25) \times 927 \\ &= 100 \times 927 \\ &= 92700 \end{aligned}$$

$$\begin{aligned} & \text{(iii) } 625 \times 20 \times 8 \times 50 \\ &= (20 \times 50) \times 8 \times 625 \\ &= 1000 \times 8 \times 625 \\ &= 8000 \times 625 \\ &= 5000000 \end{aligned}$$

$$\begin{aligned} & \text{(iv) } 574 \times 625 \times 16 \\ &= 574 \times (625 \times 16) \\ &= 574 \times 10000 \\ &= 5740000 \end{aligned}$$

$$\begin{aligned} & \text{(v) } 250 \times 60 \times 50 \times 8 \\ &= (250 \times 8) \times (60 \times 50) \\ &= 2000 \times 3000 \\ &= 6000000 \end{aligned}$$

$$\begin{aligned} & \text{(vi) } 8 \times 125 \times 40 \times 25 \\ &= (8 \times 125) \times (40 \times 25) \\ &= 1000 \times 1000 \\ &= 1000000 \end{aligned}$$

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