



Operations on Whole Numbers Ex 4.1 Q3

**Answer :**

$$(i) 953 + 407 + 647$$

$$\because 53 + 47 = 100$$

$$\therefore (953 + 647) + 407 = 1600 + 407 = 2007$$

$$(ii) 15409 + 178 + 591 + 322$$

$$\because 409 + 91 = 500$$

and

$$78 + 22 = 100$$

$$\therefore (15409 + 591) + (178 + 322)$$

$$= (16000) + (500)$$

$$= 16500$$

$$(iii) 2359 + 10001 + 2641 + 9999$$

$$\because 59 + 41 = 100$$

and

$$99 + 01 = 100$$

$$\therefore (2359 + 2641) + (10001 + 9999)$$

$$= (5000) + (20000)$$

$$= 25000$$

$$(iv) 1 + 2 + 3 + 4 + 1996 + 1997 + 1998 + 1999$$

$$\because 99 + 1 = 100$$

$$98 + 2 = 100$$

$$97 + 3 = 100$$

and

$$96 + 4 = 100$$

$$\begin{aligned}\therefore (1 + 1999) + (2 + 1998) + (3 + 1997) + (4 + 1996) \\ &= 2000 + 2000 + 2000 + 2000 \\ &= 8000\end{aligned}$$

$$(v) 10 + 11 + 12 + 13 + 14 + 15 + 16 + 17 + 18 + 19 + 20$$

$$\therefore 10 + 20 = 30$$

$$1 + 9 = 10$$

$$2 + 8 = 10$$

$$3 + 7 = 10$$

and

$$4 + 6 = 10$$

$$\begin{aligned}\therefore (10 + 20) + (11 + 19) + (12 + 18) + (13 + 17) + (14 + 16) + 15 \\ &= 30 + 30 + 30 + 30 + 30 + 15 \\ &= 150 + 15 \\ &= 165\end{aligned}$$

#### Operations on Whole Numbers Ex 4.1 Q4

**Answer :**

(i) FALSE (  $3 + 5 = 8$ ; 8 is an even number.)

(ii) TRUE (  $3 + 5 = 8$ ; 8 is an even number.)

(iii) TRUE (  $2 + 4 = 6$ ; 6 is an even number.)

(iv) FALSE (  $2 + 4 = 6$ ; 6 is an even number.)

(v) TRUE (  $2 + 3 = 5$ ; 5 is an odd number.)

(vi) FALSE (  $3 + 2 = 5$ ; 5 is not an even number.)

(vii) FALSE [The whole number set is  $\{0, 1, 2, 3, 4, \dots\}$ , whereas the natural number set is  $\{1, 2, 3, 4, \dots\}$ .]

(viii) TRUE [The whole number set is  $\{0, 1, 2, 3, 4, \dots\}$ , whereas the natural number set is  $\{1, 2, 3, 4, \dots\}$ .]

(ix) TRUE [That number is zero.]

(x) FALSE

(xi) FALSE

(xii) TRUE

\*\*\*\*\* END \*\*\*\*\*