



Negative Numbers and Integers Ex 5.4 Q8

Answer :

$$\begin{aligned} \text{(i)} \quad & -8 - 24 + 31 - 26 - 28 + 7 + 19 - 18 - 8 + 33 \\ & = (-8 - 24) + (31 - 26) + (-28 + 7) + (19 - 18) + (-8 + 33) \\ & = (-32 + 5 - 21) + (1 + 25) \\ & = -48 + 26 \\ & = -22 \end{aligned}$$

$$\begin{aligned} \text{(ii)} \quad & -26 - 20 + 33 - (-33) + 21 + 24 - (-25) - 26 - 14 - 34 \\ & = (-26 - 20) + (33 + 33) + (21 + 24) + (25 - 26) + (-14 - 34) \\ & = (-46 + 66) + (45 - 1 - 48) \\ & = 20 - 4 \\ & = 16 \end{aligned}$$

Negative Numbers and Integers Ex 5.4 Q9

Answer :

$$\begin{aligned} & 1 - 2 + 3 - 4 + 5 - 6 + 7 - 8 + 9 - 10 + 11 - 12 + 13 - 14 + 15 - 16 \\ & = (1 + 3 + 5 + 7 + 9 + 11 + 13 + 15) - (2 + 4 + 6 + 8 + 10 + 12 + 14 + 16) \\ & = 64 - 72 \\ & = -8 \end{aligned}$$

Negative Numbers and Integers Ex 5.4 Q10

Answer :

- (i) If the number of terms is 10, then $5 + (-5) + 5 + (-5) + 5 + (-5) + 5 + (-5) + 5 + (-5) = 0$.
(ii) If the number of terms is 11, then $5 + (-5) + 5 + (-5) + 5 + (-5) + 5 + (-5) + 5 + (-5) + 5 = 5$.

Negative Numbers and Integers Ex 5.4 Q11

Answer :

$$\begin{aligned} \text{(i)} \quad & (-6) + (-9) = -15 < (-6) - (-9) = -6 + 9 = 3 \\ \text{(ii)} \quad & (-12) - (-12) = -12 + 12 = 0 > (-12) + (-12) = -12 - 12 = -24 \\ \text{(iii)} \quad & (-20) - (-20) = -20 + 20 = 0 > 20 - 65 = -45 \\ \text{(iv)} \quad & 28 - (-10) = 28 + 10 = 38 < -16 - (-76) = -16 + 76 = 60 \end{aligned}$$

***** END *****