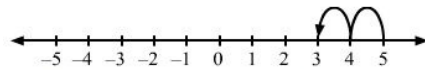




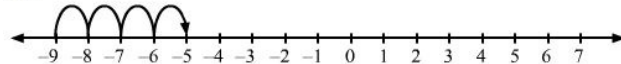
Negative Numbers and Integers Ex 5.2 Q1

Answer :

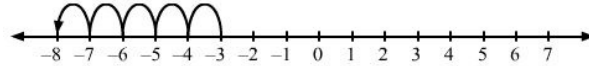
(i) If we start from 5 and move 2 units to the left of 5, we will obtain 3, as shown on the number line.



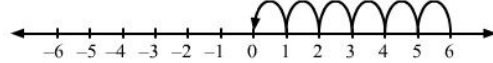
(ii) If we start from -9 and move 4 units to the right of -9, we will obtain -5, as shown on the number line.



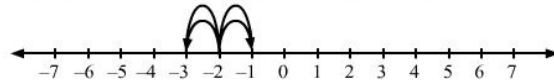
(iii) If we start from -3 and move 5 units to the left of -3, we will obtain -8, as shown on the number line.



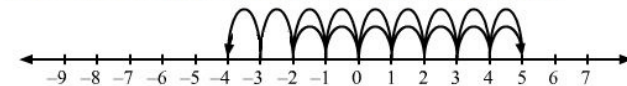
(iv) If we start from 6 and move 6 units to the left of 6, we will obtain 0, as shown on the number line.



(v) If we start from -1 and move 2 units to the left of -1, we will obtain -3; and then if we start from -3 and move 2 units to the left, we will obtain -5, as shown on the number line.



(vi) If we start from -2 and move 7 units to the right, we will obtain 5; and then if we start from 5 and move 9 units to the left, we will obtain -4, as shown on the number line.



Negative Numbers and Integers Ex 5.2 Q2

Answer :

(i) Here, we have to add integers of unlike sign, therefore we find the difference of their absolute values & assign the sign of the addend having greater absolute value.

$$\begin{aligned}
 &(-557) + 488 \\
 &= -[|-557| - |488|] \quad (\text{As, } |-557| = 557, |488| = 488) \\
 &= -[557 - 488] \\
 &= -69
 \end{aligned}$$

(ii) Here, we have to add integers that are both negative.

$$\begin{aligned}
 &(-552) + (-160) \\
 &= -[|-552| + |-160|] \quad (\text{As, } |-552| = 552, |-160| = 160) \\
 &= -[552 + 160] \\
 &= -712
 \end{aligned}$$

(iii) Here, we have to add integers of unlike signs, therefore we find the difference of their absolute values & assign sign of the addend having greater absolute value.

$$\begin{aligned}
 &(2567) + (-325) \\
 &= [|2567| - |-325|] \quad (\text{As, } |2567| = 2567, |-325| = 325) \\
 &= [2567 - 325] \\
 &= 2242
 \end{aligned}$$

(iv) Here, we have to add integers of unlike sign, therefore we find the difference of their absolute values & assign the sign of the addend having greater absolute value.

$$\begin{aligned}
& (-10025) + 139 \\
&= -[|-10025| - |139|] \quad (As, |-10025| = 10025, |139| = 139) \\
&= -[10025 - 139] \\
&= -9886
\end{aligned}$$

(v) Here, we have to add integers of unlike signs, therefore we find the difference of their absolute values & assign sign of the addend having greater absolute value.

$$\begin{aligned}
& (2547) + (-2548) \\
&= -[|2548| - |-2547|] \quad (As, |2548| = 2548, |-2547| = 2547) \\
&= -[2548 - 2547] \\
&= -1
\end{aligned}$$

(vi) Here, we have to add integers of unlike signs, therefore we find the difference of their absolute values & assign sign of the addend having greater absolute value.

$$\begin{aligned}
& (2884) + (-2884) \\
&= [|2884| - |-2884|] \quad (As, |2884| = 2884, |-2884| = 2884) \\
&= [2884 - 2884] \\
&= 0
\end{aligned}$$

***** END *****