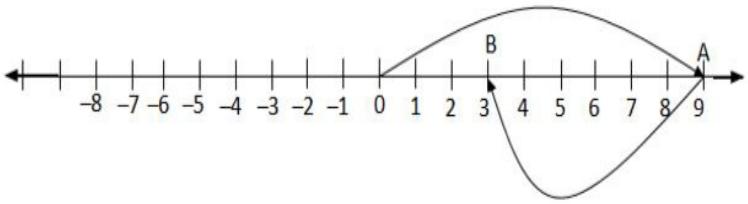
Exercise 4B

Q1

Answer :

i) On the number line, we start from 0 and move 9 steps to the right to reach a point A. Now, starting from A, we move 6 steps to the left to reach point B.



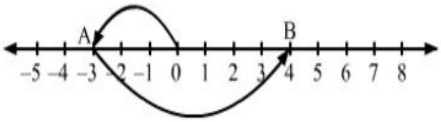
B represents the integer 3.

$\therefore 9 + (-6) = 3$

(ii) On the number line, we start from 0 and move 3 steps to the left to reach point A. Now, starting from A, we move 7 steps to the right to reach point B.

B represents the integer 4.

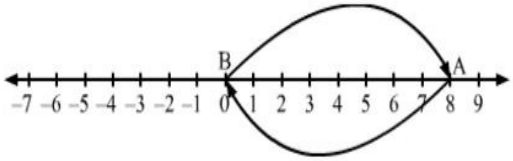
$\therefore (-3) + 7 = 4$



(iii) On the number line, we start from 0 and move 8 steps to the right to reach point A. Now, starting from A, we move 8 steps to the left to reach point B.

B represents the integer 0.

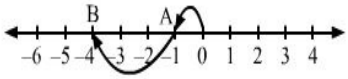
$\therefore 8 + (-8) = 0$



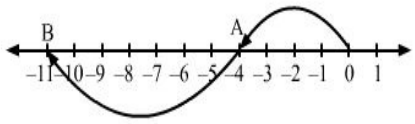
(iv) On the number line, we start from 0 and move 1 step to the left to reach point A. Now, starting from A, we move 3 steps to the left to reach point B.

B represents the integer –4.

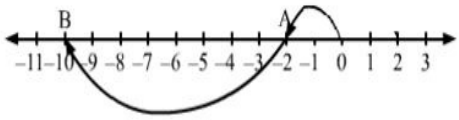
$\therefore (-1) + (-3) = -4$



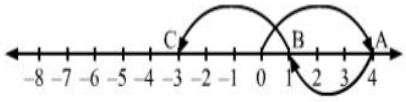
(v) On the number line, we start from 0 and move 4 steps to the left to reach point A. Now, starting from A, we move 7 steps to the left to reach point B.
B represents the integer −11.
∴ (−4) + (−7) = −11



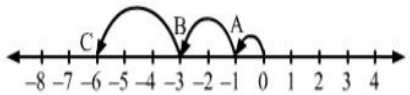
(vi) On the number line, we start from 0 and move 2 steps to the left to reach point A. Now, starting from A, we move 8 steps to the left to reach point B.
B represents the integer −10.
∴ (−2) + (−8) = −10



(vii) On the number line, we start from 0 and move 3 steps to the right to reach point A. Now, starting from A, we move 2 steps to the left to reach point B. Again, starting from B, we move 4 steps to the left to reach point C.
C represents the integer −3.
∴ 3 + (−2) + (−4) = −3

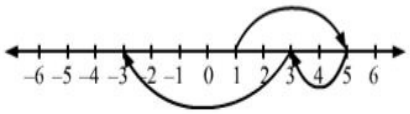


(viii) On the number line, we start from 0 and move 1 step to the left to reach point A. Now, starting from A, we move 2 steps to the left to reach point B. Again, starting from B, we move 3 steps to the left to reach point C.
C represents the integer −6.
∴ (−1) + (−2) + (−3) = −6



Q2

(ix) On the number line, we start from 0 and move 5 steps to the right to reach point A. Now, starting from A, we move 2 steps to the left to reach point B. Again, starting from B, we move 6 steps to the left to reach point C.
C represents the integer −3.
$\therefore 5 + (-2) + (-6) = -3$



(iv)
$(-13) + 25$
$= -13 + 25$
$= 12$

(v)
$8 + (-17)$
$= 8 - 17$
$= -9$

(v)
$2 + (-12)$
$= 2 - 12$
$= -10$

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