

Board -CBSE

Class - 6th

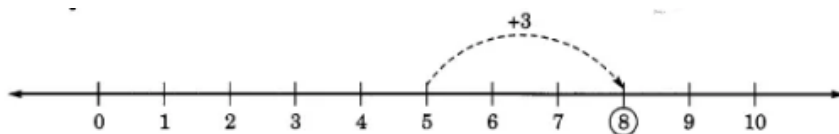
Topic - Integer Ex: 6.2

Exercise - 6.2

Q1. Using the number line write the integer which is:

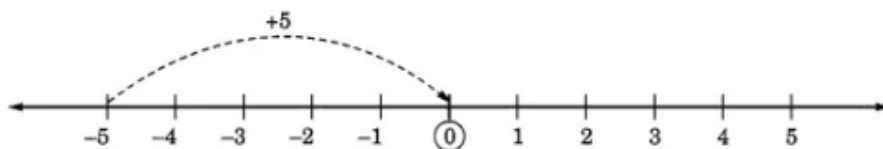
- (a) 3 more than 5
- (b) 5 more than -5
- (c) 6 less than 2

Sol. (a) 3 more than 5



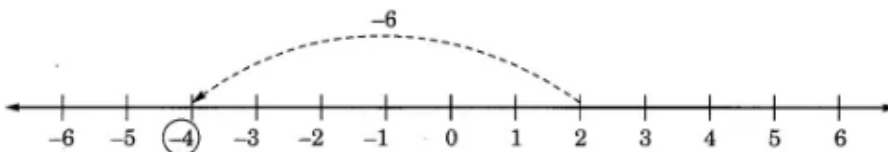
Moving right 3 steps from 5, we reach 8. Hence, 3 more than 5 = 8.

(b) 5 more than -5



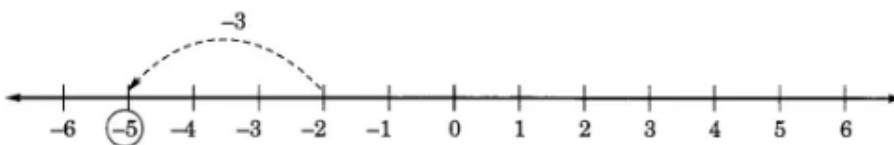
Moving right 5 steps from -5 we reach at 0. Hence, 5 more than -5 = 0

(c) 6 less than 2



Moving left 6 steps from 2, we reach at -4. Hence, 6 less than 2 = -4

(d) 3 less than -2

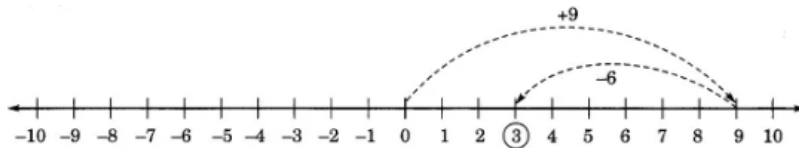


Moving left 3 steps from -2, we reach -5.

Q2. Use number line and add the following integers:

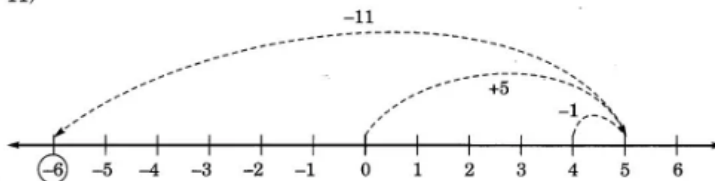
- (a) $9 + (-6)$
- (b) $5 + (-11)$
- (c) $(-1) + (-7)$
- (d) $(-5) + 10$
- (e) $(-1) + (-2) + (-3)$

Sol. (a) $9 + (-6)$



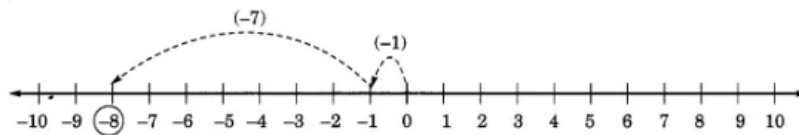
Hence, $9 + (-6) = 3$.

(b) $5 + (-11)$



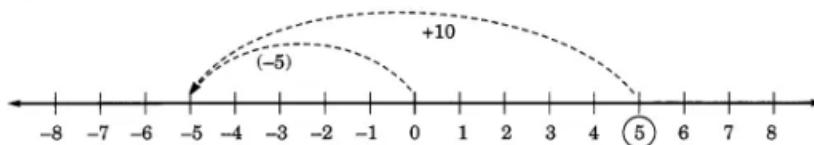
Hence, $5 + (-11) = -6$.

(c) $(-1) + (-7)$



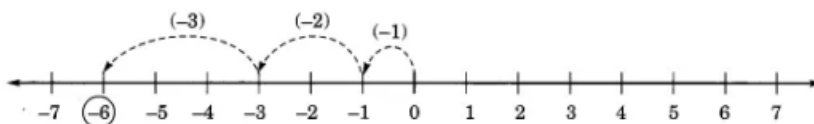
Hence, $(-1) + (-7) = (-8)$.

(d) $(-5) + 10$



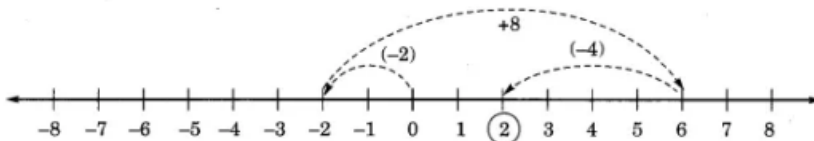
Hence, $(-5) + 10 = 5$.

(e) $(-1) + (-2) + (-3)$



Hence, $(-1) + (-2) + (-3) = (-6)$.

(f) $(-2) + 8 + (-4)$



Hence, $(-2) + 8 + (-4) = 2$.

Q3. Add without using number line:

(a) $11 + (-7)$

(b) $(-13) + (+18)$

(c) $(-10) + (+19)$

(d) $(-250) + (+150)$

(e) $(-380) + (-270)$

(f) $(-217) + (-100)$.

Sol. (a) $11 + (-7) = 4 + (+7) + (-7)$

$[\because (+7) + (-7) = 0]$

$= 4 + 0 = 4$

Hence, $11 + (-7) = 4$.

(b) $(-13) + (+18) = (-13) + (+13) + (+5)$

$[\because (-13) + (+13) = 0]$

$= 0 + (+5) = 5$

Hence, $(-13) + (+18) = 5$.

$$(c) (-10) + (+19) = (-10) + (+10) + (+9)$$

$$[\because (-10) + (10) = 0] = 0 + (+9) = 9$$

$$\text{Hence, } (-10) + (19) = 9.$$

$$(d) (-250) + (+150) = (-100) + (-150) + (+150)$$

$$= (-100) + 0 = -100 [\because (-150) + (+150) = 0]$$

$$\text{Hence, } (-250) + (+150) = -100.$$

$$(e) (-380) + (-270) = -[380 + 270] = (-650)$$

$$\text{Hence, } (-380) + (-270) = (-650).$$

$$(f) (-217) + (-100) = -[217 + 100] = -317$$

Q4. Find the sum of:

(a) 137 and -354

(b) -52 and 52

(c) -312, 39 and 192

(d) -50, -200 and 300

Sol. (a) 137 and -354

$$(137) + (-354) = (137) + (-137) + (-217) [\because (137) + (-137) = 0]$$

$$= 0 + (-217) = (-217)$$

(b) -52 and 52

$$(-52) + (+52) = 0 [\because (-a) + (+a) = 0]$$

(c) -312, 39 and 192

$$(-312) + (+39) + (+192)$$

$$= (-231) + (-81) + (+39) + (+192)$$

$$= (-231) + (-81) + (+231)$$

$$= (-231) + (+231) + (-81)$$

$$[\because (-a) + (a) = 0]$$

$$= 0 + (-81) = -81$$

Q5. Find the sum of:

(a) $(-7) + (-9) + 4 + 16$

(b) $(37) + (-2) + (-65) + (-18)$

Sol. (a) $(-7) + (-9) + 4 + 16$

$$= (-7) + (-9) + 4 + (+7) + (+9)$$

$$= (-7) + (+7) + (-9) + (+9) + 4$$

$$= 0 + 0 + 4 = 4 [\because (-a) + (a) = 0]$$

(b) $(37) + (-2) + (-65) + (-8)$

$$= (+37) + (-75)$$

$$= (+37) + (-37) + (-38)$$

$$= 0 + (-38) = (-38) [\because (-a) + (+a) = 0]$$