

Board – CBSE

Class – 6TH

Topic – INTEGERS

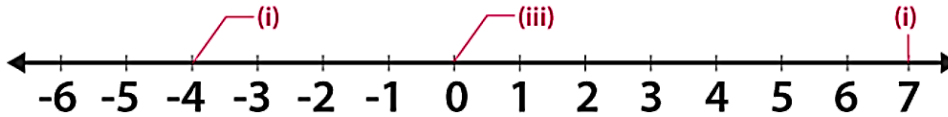
1. Mark the following integers on a number line:

(i) 7

(ii) -4

(iii) 0

Sol: The following integers are marked on a number line as given below:



2. Write the following integers in increasing order:

(i) - 8, 5, 0, -12, 1, -9, 15

(ii) - 106, 107, -320, - 7, 185

Sol: (i) - 8, 5, 0, -12, 1, -9, 15 can be written in increasing order as -12, -9, -8, 0, 1, 5, 15

(ii) -106, 107, -320, -7, 185 can be written in increasing order as -320, -106, -7, 107, 185.

3. Write the following integers in decreasing order:

(i) - 15, 0, -2, -9, 7, 6, -5, 8

(ii) -154, 123, -205, -89, -74

Sol: (i) - 15, 0, -2, -9, 7, 6, -5, 8 can be written in decreasing order as 8, 7, 6, 0, -2, -5, -9, -15

(ii) -154, 123, -205, -89, -74 can be written in decreasing order as 123, -74, -89, -154, -205

4. Find the value of:

(i) $- 27 - (- 23)$

(ii) $- 17 - 18 - (-35)$

(iii) $- 12 - (-5) - (-125) + 270$

Sol: (i) $- 27 - (- 23)$

So we get

$$= - 27 + 23$$

On further calculation

$$= 23 - 27$$

We get

$$= -4$$

(ii) $- 17 - 18 - (-35)$

So we get

$$= - 35 + 35$$

On further calculation

$$= 0$$

$$(iii) -12 - (-5) - (-125) + 270$$

So we get

$$= -12 + 5 + 125 + 270$$

On further calculation

$$= 400 - 12$$

We get

$$= 388$$

5. Subtract the first integer from the second in each of the following:

(i) $12, -5$

(ii) $7560, -8$

Sol: (i) $12, -5$

So by subtracting the first integer from the second

$$-5 - 12 = -17$$

(ii) $7560, -8$

So by subtracting the first integer from the second

$$-8 - 7560 = -7568$$

6. Draw a number line and represent each of the following on it:

(i) $5 + (-2)$

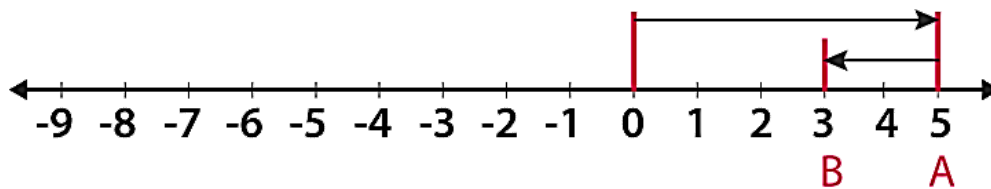
(ii) $(-9) + 4$

(iii) $(-2) + 7 + (-9)$

Sol: (i) $5 + (-2)$

From 0 move towards right of first five units to obtain + 5

So the second number is - 2 so move 2 units towards left of + 5 we get + 3

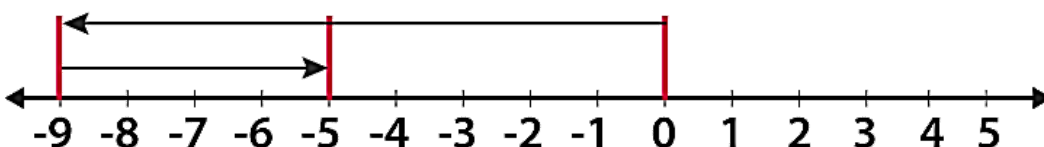


Therefore, $5 + (-2) = 3$.

(ii) $(-9) + 4$

From 0 move towards the left by nine units to obtain - 9

So the second number is 4 so move 4 units towards the right of - 9 we get - 5



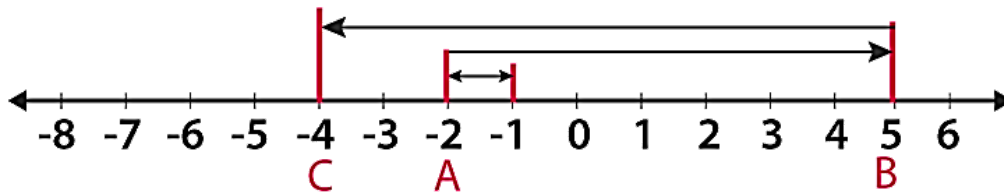
Therefore, $(-9) + 4 = -5$.

(ii) $(-2) + 7 + (-9)$

From zero move towards the left by two units to obtain -2

So the second number is 7 so move 7 units towards the right of -2 we get 5

The third number is -9 so move 9 units towards left of 5 we get -4



Therefore, $(-2) + 7 + (-9) = -4$.

7. Indicate the following by using integers:

(i) 25° above zero

(ii) 5° below zero

(iii) A profit of Rs 800

Sol: (i) 25° above zero is $+25^\circ$.

(ii) 5° below zero is -5° .

(iii) A profit of Rs 800 is $+800$.

8. The sum of two integers is 238. If one of the integers is -122 , determine the other.

Sol: It is given that,

Sum of two integers = 238

One of the integers = -122

So the other integer = $-(-122) + 138$

On further calculation,

Other integer = $238 + 122 = 360$