

Access answers to Maths NCERT Solutions for Class 7 Chapter 1 – Integers Exercise 1.2

1. Write down a pair of integers whose:

(a) sum is -7

Solution:-

$$= -4 + (-3)$$

$$= -4 - 3 \dots [\because (+ \times - = -)]$$

$$= -7$$

(b) difference is -10

Solution:-

$$= -25 - (-15)$$

$$= -25 + 15 \dots [\because (- \times - = +)]$$

$$= -10$$

(c) sum is 0

Solution:-

$$= 4 + (-4)$$

$$= 4 - 4$$

$$= 0$$

2. (a) Write a pair of negative integers whose difference gives 8

Solution:-

$$= (-5) - (-13)$$

$$= -5 + 13 \dots [\because (- \times - = +)]$$

$$= 8$$

(b) Write a negative integer and a positive integer whose sum is -5.

Solution:-

$$= -25 + 20$$

$$= -5$$

(c) Write a negative integer and a positive integer whose difference is -3 .

Solution:-

$$= -6 - (-3)$$

$$= -6 + 3 \dots [\because (- \times - = +)]$$

$$= -3$$

3. In a quiz, team A scored $-40, 10, 0$ and team B scored $10, 0, -40$ in three successive rounds. Which team scored more? Can we say that we can add integers in any order?

Solution:-

From the question, it is given that

Score of team A = $-40, 10, 0$

Total score obtained by team A = $-40 + 10 + 0$

$$= -30$$

Score of team B = $10, 0, -40$

Total score obtained by team B = $10 + 0 + (-40)$

$$= 10 + 0 - 40$$

$$= -30$$

Thus, the score of the both A team and B team is same.

Yes, we can say that we can add integers in any order.

4. Fill in the blanks to make the following statements true:

(i) $(-5) + (-8) = (-8) + (\dots\dots\dots)$

Solution:-

Let us assume the missing integer be x ,

Then,

$$= (-5) + (-8) = (-8) + (x)$$

$$= -5 - 8 = -8 + x$$

$$= -13 = -8 + x$$

By sending -8 from RHS to LHS it becomes 8 ,

$$= -13 + 8 = x$$

$$= x = -5$$

Now substitute the x value in the blank place,

$(-5) + (-8) = (-8) + (-5) \dots$ [This equation is in the form of Commutative law of Addition]

(ii) $-53 + \dots = -53$

Solution:-

Let us assume the missing integer be x,

Then,

$$= -53 + x = -53$$

By sending -53 from LHS to RHS it becomes 53,

$$= x = -53 + 53$$

$$= x = 0$$

Now substitute the x value in the blank place,

$$= -53 + 0 = -53 \dots$$
 [This equation is in the form of Closure property of Addition]

(iii) $17 + \dots = 0$

Solution:-

Let us assume the missing integer be x,

Then,

$$= 17 + x = 0$$

By sending 17 from LHS to RHS it becomes -17,

$$= x = 0 - 17$$

$$= x = -17$$

Now substitute the x value in the blank place,

$$= 17 + (-17) = 0 \dots$$
 [This equation is in the form of Closure property of Addition]

$$= 17 - 17 = 0$$

(iv) $[13 + (-12)] + (\dots) = 13 + [(-12) + (-7)]$

Solution:-

Let us assume the missing integer be x,

Then,

$$= [13 + (-12)] + (x) = 13 + [(-12) + (-7)]$$

$$= [13 - 12] + (x) = 13 + [-12 - 7]$$

$$= [1] + (x) = 13 + [-19]$$

$$= 1 + (x) = 13 - 19$$

$$= 1 + (x) = -6$$

By sending 1 from LHS to RHS it becomes -1,

$$= x = -6 - 1$$

$$= x = -7$$

Now substitute the x value in the blank place,

$= [13 + (-12)] + (-7) = 13 + [(-12) + (-7)] \dots$ [This equation is in the form of Associative property of Addition]

(v) $(-4) + [15 + (-3)] = [-4 + 15] + \dots$

Solution:-

Let us assume the missing integer be x,

Then,

$$= (-4) + [15 + (-3)] = [-4 + 15] + x$$

$$= (-4) + [15 - 3] = [-4 + 15] + x$$

$$= (-4) + [12] = [11] + x$$

$$= 8 = 11 + x$$

By sending 11 from RHS to LHS it becomes -11,

$$= 8 - 11 = x$$

$$= x = -3$$

Now substitute the x value in the blank place,

$= (-4) + [15 + (-3)] = [-4 + 15] + -3 \dots$ [This equation is in the form of Associative property of Addition]