Chapter – 1
Integers
Exercise 1.2

1. Write down a pair of integers whose:
(a) Sum is – 7
(b) Difference is – 10
(c) Sum is 0

Answer:

(a) It is given in the question that,
Sum = -7
Therefore,
Pair of integers having sum – 7 is as follows:
- 8 + (1) = -7

(b) It is given in the question that,
Difference = -10
Therefore,
Pair of integers having the difference – 10 is as follows:
-12 – (-2)
= - 12 + 2
= - 10

(c) It is given in the question that,
Sum = 0
Therefore,
Pair of integers having sum 0 is as follows:
4 + (-4) = 0

2.

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

Answer:

It is given in the question that,

Difference = 8

Therefore,

Pair of negative integers having difference 8 is as follows:

-2 – (-10)

= - 2 + 10

= 8

(B) Write a negative integer and a positive integer whose sum is –5.

Answer:

It is given in the question that,

Sum = - 5

Therefore,

Negative integer and positive integer having sum – 5 is as follows:

- 8 + (3) = - 5

(C) Write a negative integer and a positive integer whose difference is – 3.

Answer:

It is given in the question that,

Difference = - 3

Therefore,

Negative integer and positive integer having difference – 3 is as follows:

- 2 – (1)

= - 2 – 1

= - 3

So the two integers are -2 and 1 respectively.

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?

Answer:

It is given in the question that,

Scores of Team A = - 40, 10, 0

Therefore,

Total score of Team A = - 40 + 10 + 0

= -30

Also,

Scores of Team B = 10, 0, - 40

Therefore,

Total score of Team B = 10 + 0 + (-40)

= 10 – 40

= -30

Hence,

It is clear from the above results that the scores of both teams are equal.

Yes, we can also add integers in any order.

As in the above case scores of both, the teams are equal in numerical terms but different in order.

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

(i) (-5) + (-8) = (-8) + (……)

(ii) -53 + ……. = -53

(iii) 17 + ……. = 0

(iv) [13 + (-12)] + (……..) = 13 + [(-12) + (-7)]
(v) (-4) + [15 + (-3)] = [- 4 + 15] + ……

Answer:

(i) We have,
(-5) + (-8) = (-8) + (…..)
By the commutative property a + b = b + a
We have,
(-5) + (-8) = (-8) + (-5)

(ii) We have,
- 53 + (…..) = - 53
As we know 0 is the number which is added to a number to give the same number.
So,
- 53 + (0) = - 53

(iii) We have,
17 + (…..) = 0
answer should be zero, and we know if we add the negative of the number itself it will give zero,
So,
17 + (-17) = 0

(iv) We have,
[13 + (-12)] + (…..) = 13 + [(-12) + (-7)]
By associative property (a + b) + c = a + (b + c)
We have,
[13 + (-12)] + (-7) = 13 + [(-12) + (-7)]

(v) We have,
(-4) + [15 + (-3)] = [(-4) + 15] + (…..)
By associative property (a + b) + c = a + (b + c)
We have,
(-4) + [15 + (-3)] = [(-4) + 15] + (-3)