



CLASS NOTES-ANSWERS

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) Let us take a pair of integers -8 and $+1$

$$\therefore (-8) + 1 = -7$$

(b) Let us take a pair of integers -12 and -2

$$\begin{aligned}\therefore -12 - (-2) &= -12 + 2 \\ &= -10\end{aligned}$$

(c) Let us take a pair of integers 5 and -5

$$\therefore 5 + (-5) = 0$$

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

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

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

Answer:

(a) Let us take -2 and -10

$$\begin{aligned}\therefore \text{Difference} &= (-2) - (-10) \\ &= -2 + 10 \\ &= 8\end{aligned}$$

(b) Let us take -10 and 5



$$\begin{aligned}\therefore \text{Sum} &= (-10) + 5 \\ &= -5\end{aligned}$$

(c) Let us take 2 and 1

$$\begin{aligned}\therefore \text{Difference} &= (-2) - 1 \\ &= -3\end{aligned}$$

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: Scores of team A = - 40, 10, 0

\therefore Total score of team A

$$\begin{aligned}&= - 40 + 10 + 0 \\ &= - 30\end{aligned}$$

Scores of team B = 10, 0, - 40

\therefore Total scores of team B

$$\begin{aligned}&= 10 + 0 + (- 40) \\ &= - 30\end{aligned}$$

So, the scores of both the teams are equal.

Yes, we can add integers in any order.

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

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

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

(iii) $17 + \dots\dots\dots = 0$



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

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

Answer:

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

[Commutative property of addition]

$$(ii) -53 + 0 = -53$$

[Additive Identity]

$$(iii) 17 + (-17) = 0$$

[Additive inverse]

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

[Associative property of addition]

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

[Associative property of addition]

