Exercise 1.2

Question 1:

Write down a pair of integers whose:

(a) sum is -7

(b) difference is -10

(a) sum is 0

Answer 1:

(a) One such pair whose sum is -7: $-5+(-2)=-7$

(b) One such pair whose difference is -10: $-2-8=-10$

(c) One such pair whose sum is 0: $-5+5=0$

Question 2:

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

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

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

Answer 2:

(a) $-2-(-10)-2+10=8$

(b) $(-7)+2=-5$

(c) $(-2)-1=-2-1=-3$

Question 3:

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

Answer 3:

Team A scored $-40,10,0$

Total score of Team A = $-40+10+0=-30$

Team B scored $10,0,-40$

Total score of Team B = $10+0+(-40)=10+0-40=-30$

Thus, scores of both teams are same.

Yes, we can add integers in any order due to commutative property.

Question 4:

Fill in the blanks to make the following statements true:

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

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

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

(iv) $\left[13+(-12)\right]+(.....)=13+\left[(-12)+(-7)\right]$

(v) $(-4)+\left[15+(-3)\right]=\left[-4+15\right]+.....$

Answer 4:

(i) $(-5)+(-8)=(-8)+\underline{(-5)}$ [Commutative property]

(ii) $-53+\underline{0}=-53$ [Zero additive property]

(i) $17+\underline{(-17)}=0$ (Additive identity]

(ii) $\left[13+(12)\right]+\underline{(-7)}=13+\left[(-12)+(-7)\right]$ [Associative property]

(iii) $(-4)+\left[15+(-3)\right]=\left[-4+15\right]+\underline{(-3)}$ [Associative property]