# Mathematics

(Chapter - 6) (Integers) (Exercise 6.1) (Class - VI)

## Question 1:

Write opposite of the following:

(a) Increase in weight

(d) Loss of ₹700

(b) 30 km north

(e) 100 m above sea level

(c) 80 m east

Answer 1:

(a) Decrease in weight

(d) Profit of ₹700

(b) 30 km south

(e) 100 m below sea level

(c) The opposite of 80 m east is 80 m west.

## Question 2:

Represent the following numbers as integers with appropriate signs.

- (a) An aeroplane is flying at a height two thousand meters above the ground.
- (b) A submarine is moving at a depth eight thousand meters below the sea level.
- (c) A deposit of rupees two hundred.
- (d) Withdrawal of rupees seven hundred.

Answer 2:

(a) (+) 200 meters

(c) (+) 200 Rupees

**(b)** (-) 800 meters

(d) (-) 700 Rupees

## Question 3:

Represent the following numbers on number line:

(a) + 5

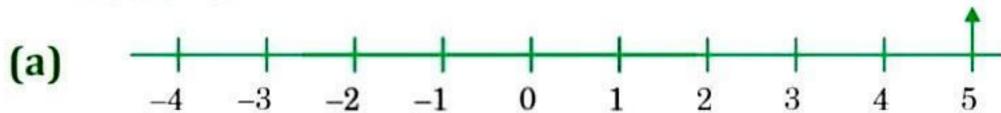
(d)-1

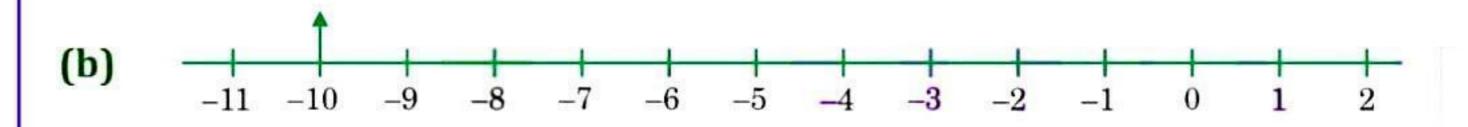
**(b)** -10

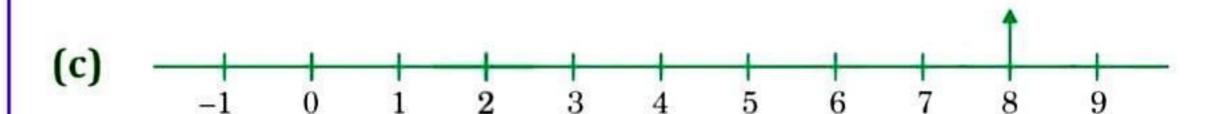
(e) -6

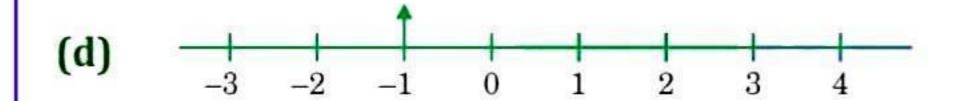
(c) + 8

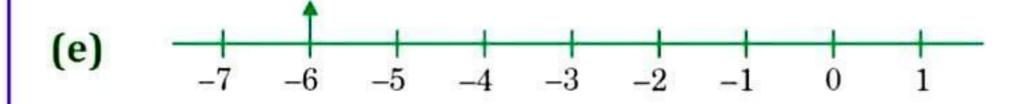
Answer 3:









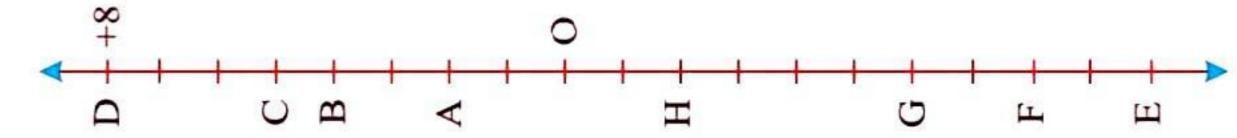


## Question 4:

Adjacent figure is a vertical number line, representing integers. Observe it and locate the following points:

- (a) If point D is +8 then which point is -8?
- (b) Is point G a negative integer or a positive integer?

- (c) Write integers for points B and E.
- (d) Which point marked on this number line has the least value?
- (e) Arrange all the points in decreasing order of values.



Answer 4:

(a) F

(d) E

(b) Negative

(e) D, C, B, A, O, H, G, F, E

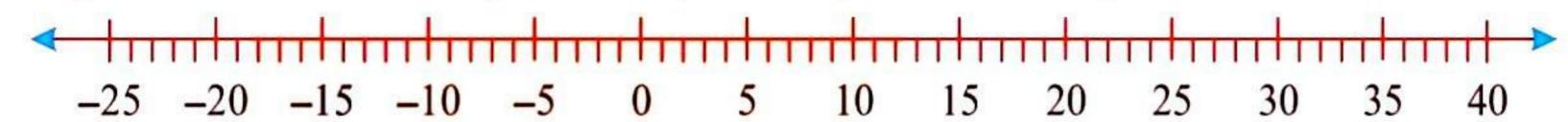
(c) B = (+) 4; E = (-) 10

## Question 5:

Following is the list of temperatures of five places in India, on a particular day of the year.

PlaceTemperatureSiachin10°C below 0°CShimla2°C below 0°CAhmedabad30°C above 0°CDelhi20°C above 0°CSrinagar5°C below 0°C

- (a) Write the temperature of these places in the form of integers in the blank column.
- (b) Following is the number line representing the temperature in degree Celsius.



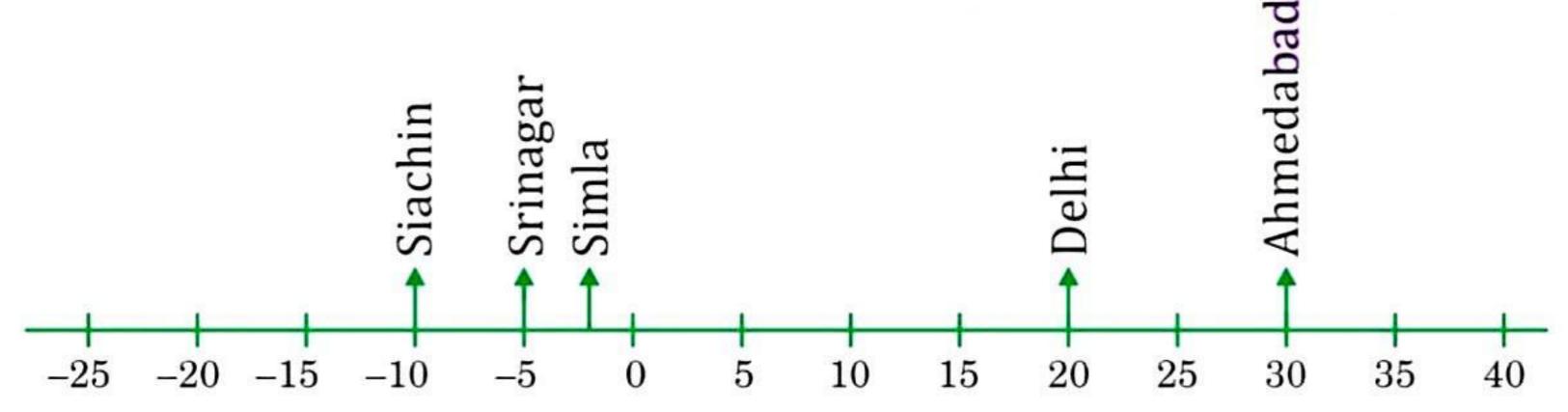
Plot the name of the city against its temperature.

- (c) Which is the coolest place?
- (d) Write the names of the place where temperature is above 10oC.

Answer 5:

# (a) Place Temperature Siachin (−) 10°C Shimla (−) 2°C Ahmedabad (+) 30°C Delhi (+) 20°C Srinagar (−) 5°C

(b) Number line



- (c) Siachin
- (d) Ahmedabad, Delhi

## Question 6:

In each of the following pairs, which number is to the right of the other on the number line?

(a) 2, 9

**(b)** -3, -8

(c) 0, -1

Answer 6:

(a) 9 is right to 2

(b) -3 is right to -8

(c) 0 is right to -1

(d) -11, 10

(e) -6, 6

**(f)** 1, –100

(d) 10 is right to -11

(e) 6 is right to -6

**(f)** 1 is right to -100

## Question 7:

Write all the integers between the given pairs (write them in the increasing order):

(a) 0 and -7

(c) -8 and -15

**(b)** -4 and 4

(d) -30 and -23

Answer 7:

(a) -6, -5, -4, -3, -2, -1

**(b)** -3, -2, -1, 0, 1, 2, 3

(c) -14, -13, -12, -11, -10, -9

(d) -29, -28, -27, -26, -25, -24

## Question 8:

(a) Write four negative integers greater than -20.

(b) Write four negative integers less than -10.

Answer 8:

(a) -19, -18, -17, -16

**(b)** -11, -12, -13, -14

## Question 9:

For the following statements write True (T) or False (F). If the statement is false, correct the statement:

(a) -8 is to the right of -10 on a number line.

(b) -100 is the right of -50 on a number line.

(c) Smallest negative integer is -1. (d) -26 is larger than -25.

Answer 9:

(a) True

(b) False

(c) False

(d) False

# Question 10:

Draw a number line and answer the following:

(a) Draw a number line will we reach if we move 4 numbers to the right of -2.

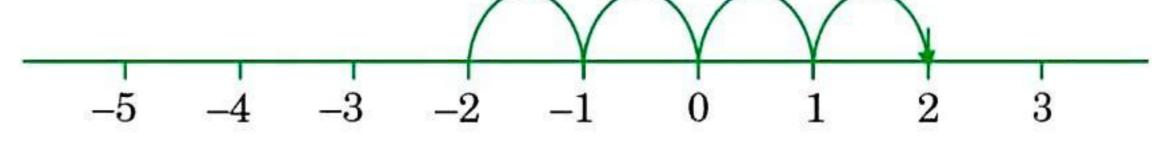
(b) Which number will we reach if we move 5 numbers to the left of 1.

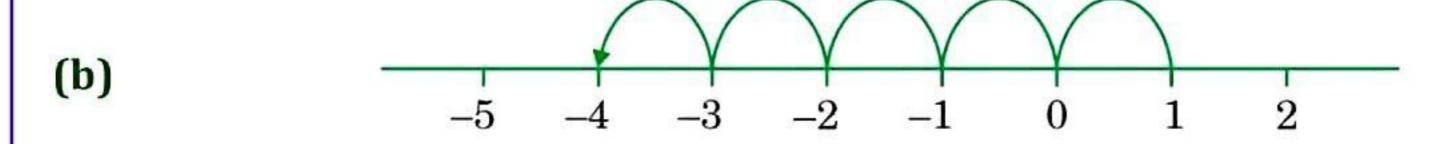
(c) If we are at -8 on the number line, in which direction should we move to reach -13?

(d) If we are at -6 on the number line, in which direction should we move to reach -1?

Answer 10:

(a)





(c) On left side

(d) On right side

# Mathematics

(Chapter - 6) (Integers) (Exercise 6.2) (Class - VI)

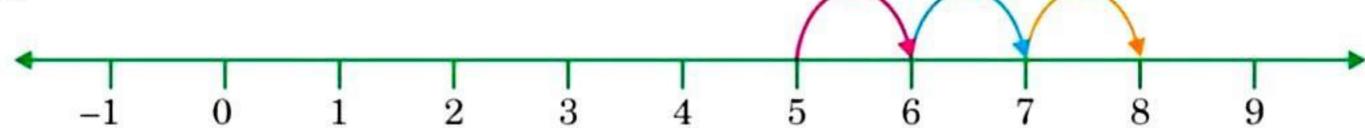
## Question 1:

Using the number line write the integer which is:

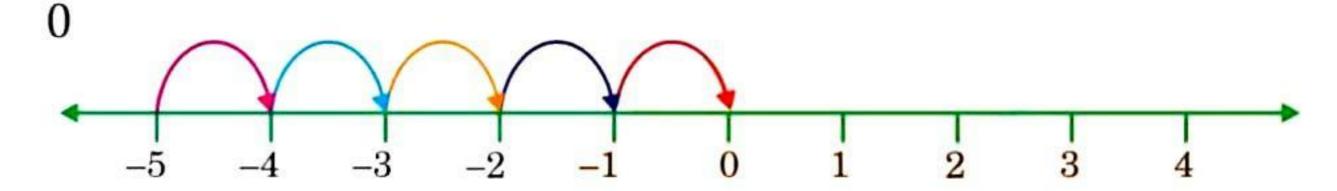
- (a) 3 more than 5
- (b) 5 more than -5
- (c) 6 less than 2
- (d) 3 less than -2

Answer 1:

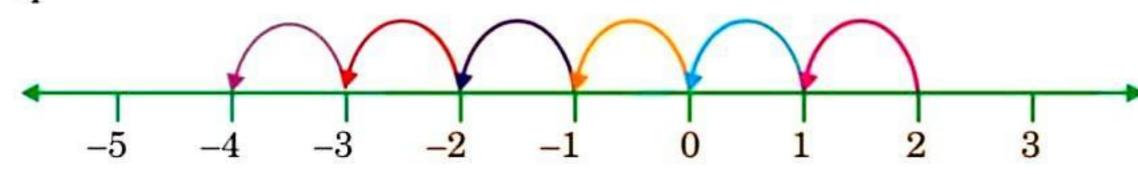
(a) 8



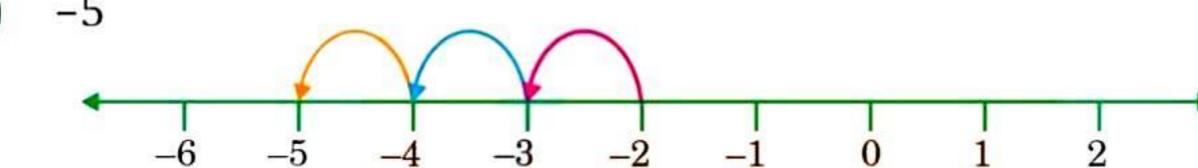
(b)



(c)



(d) -5



## Question 2:

Use number line and add the following integers:

(a) 
$$9 + (-6)$$

**(b)** 
$$5 + (-11)$$

(c) 
$$(-1) + (-7)$$

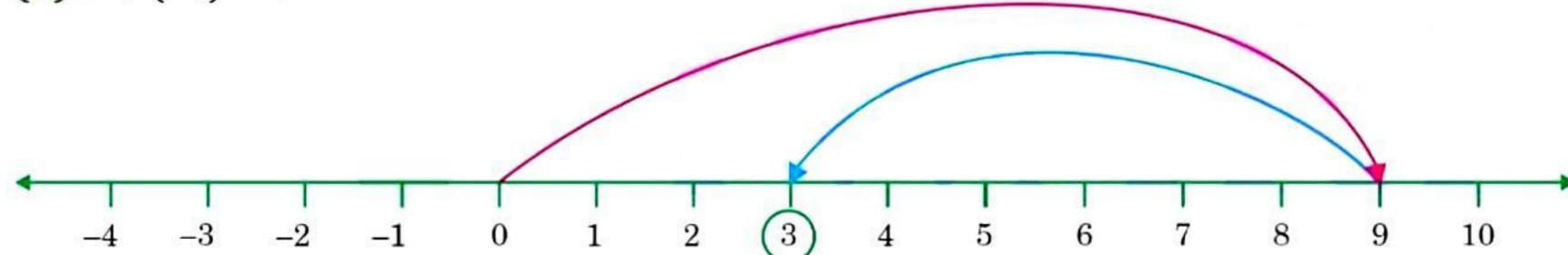
(c) 
$$(-1) + (-7)$$

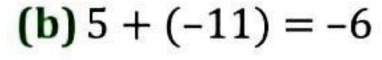
(a) 
$$9 + (-6) = 3$$

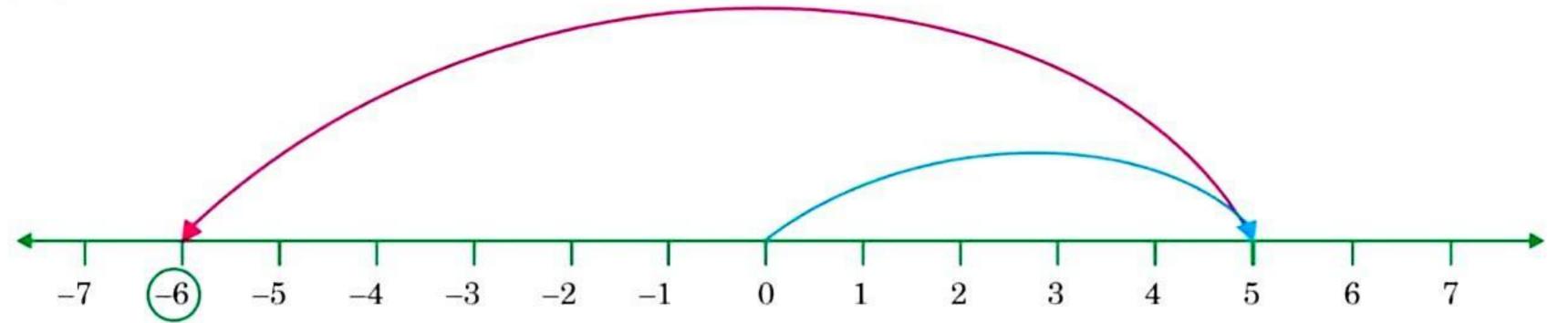
(d) (-5) + 10

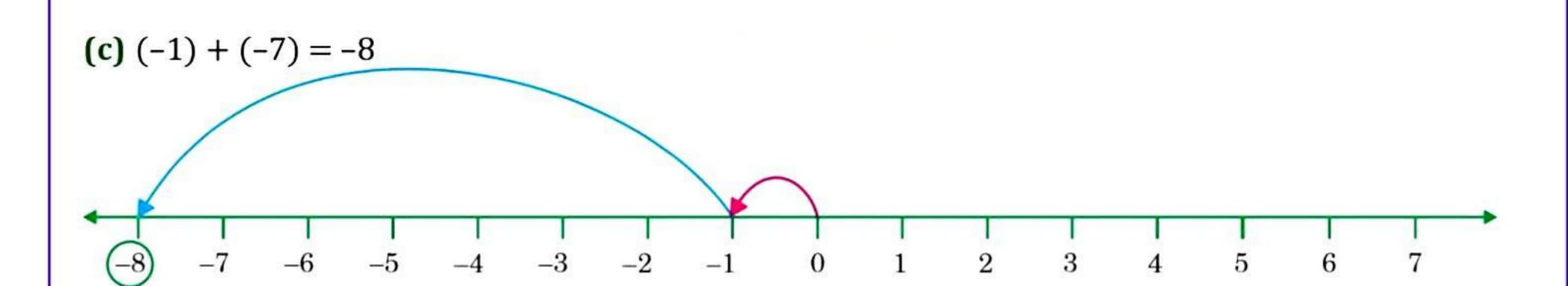
(e) 
$$(-1) + (-2) + (-3)$$

(f) 
$$(-2) + 8 + (-4)$$

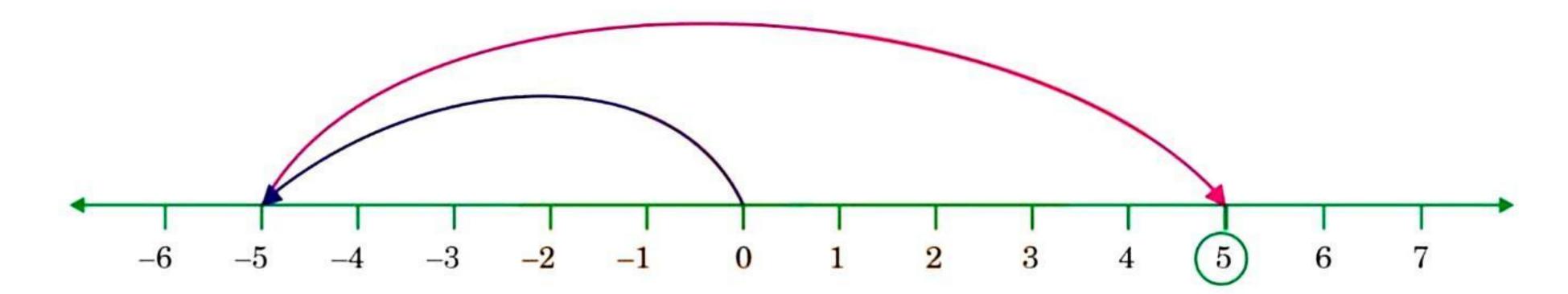




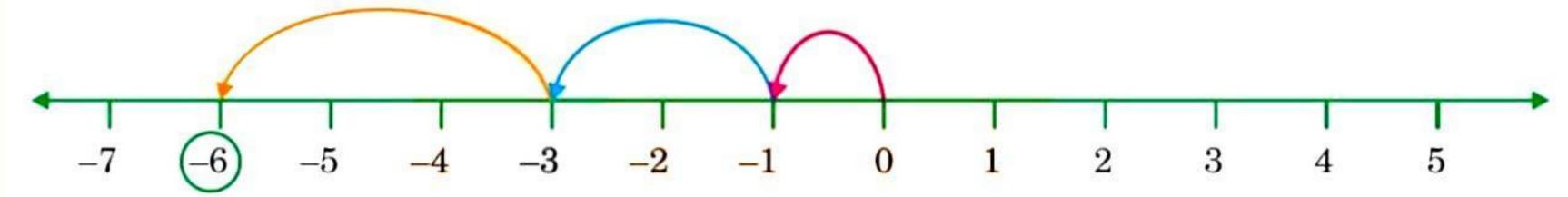




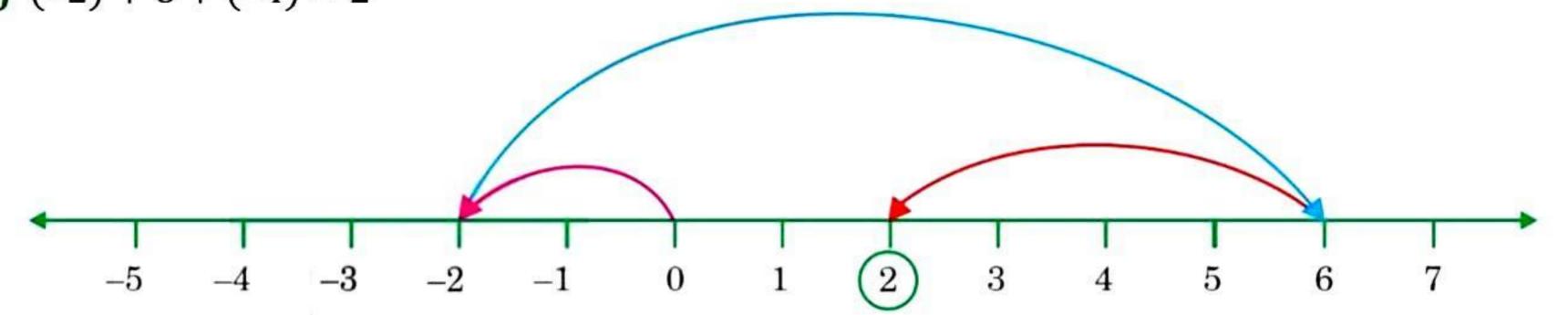
(d) 
$$(-5) + 10 = 5$$



(e) 
$$(-1) + (-2) + (-3) = -6$$



(f) 
$$(-2) + 8 + (-4) = 2$$



## Question 3:

Add without using number line:

(a) 
$$11 + (-7)$$

**(b)** 
$$(-13) + (+18)$$

(c) 
$$(-10) + (+19)$$

(a) 
$$11 + (-7) = 11 - 7 = 4$$

**(b)** 
$$(-13) + 18 = 5$$

(c) 
$$(-10) + (+19) = -10 + 19 = 9$$

(d) 
$$(-250) + (+150) = -250 + 150 = -100$$

(e) 
$$(-380) + (-270) = -380 - 270 = -650$$

(f) 
$$(-217) + (-100) = -217 \text{ v} 100 = -317$$

(d) 
$$(-250) + (+150)$$

(e) 
$$(-380) + (-270)$$

(f) 
$$(-217) + (-100)$$

## Question 4:

Find the sum of:

(c) -213, 39 and 192

(b) 
$$-52$$
 and  $52$ 

(d) -50, -200 and 300

Answer 4:

(a) 
$$137 + (-354) = 137 - 354 = -217$$

**(b)** 
$$(-52) + 52 = 0$$

(c) 
$$(-312) + 39 + 192 = -312 + 231 = -81$$

(d) 
$$(-50) + (-200) + 300 = -50 - 200 + 300 = -250 + 300 = 50$$

## Question 5:

Find the value of:

(a) 
$$(-7) + (-9) + 4 + 16$$

**(b)** 
$$37 + (-2) + (-65) + (-8)$$

Answer 5:

(a) 
$$(-7) + (-9) + 4 + 16$$

$$= -7 - 9 + 4 + 16$$

$$= -16 + 20 = 4$$

**(b)** 
$$37 + (-2) + (-65) + (-8)$$

$$= 37 - 2 - 65 - 8$$

$$= 37 - 75 = -38$$

# Mathematics

(Chapter - 6) (Integers) (Exercise 6.3) (Class - VI)

(d) (-20) – (13)

(f) (-32) - (-40)

(e) 23 - (-12)

#### Question 1:

Find:

(a) 
$$35 - (20)$$

(c) 
$$(-15)$$
 -  $(-18)$ 

Answer 1:

(a) 
$$35 - 20 = 15$$

**(b)** 
$$72 - 90 = -18$$

(c) 
$$(-15) - (-18) = -15 + 18 = 3$$

(d) 
$$-20 - (13) = -20 - 13 = -33$$

(e) 
$$23 - (-12) = 23 + 12 = 35$$

(f) 
$$(-32) - (-40) = -32 + 40 = 8$$

## Question 2:

Fill in the blanks with >, < or = sign:

(a) 
$$(-3) + (-6)$$
 \_\_\_\_\_  $(-3) - (-6)$ 

**(b)** 
$$(-21) - (-10)$$
 \_\_\_\_\_  $(-31) + (-11)$ 

(c) 
$$45 - (-11)$$
 \_\_\_\_\_  $57 + (-4)$ 

(d) 
$$(-25)$$
 -  $(-42)$  \_\_\_\_\_  $(-42)$  -  $(-25)$ 

Answer 1:

(a) 
$$(-3) + (-6) \le (-3) - (-6)$$

**(b)** 
$$(-21) - (-10) \ge (-31) + (-11)$$

(c) 
$$45 - (-11) \ge 57 + (-4)$$

(d) 
$$(-25)$$
 -  $(-42)$   $\geq$   $(-42)$  -  $(-25)$ 

#### Question 3:

Fill in the blanks:

(a) 
$$(-8) + \underline{\hspace{1cm}} = 0$$

**(b)** 
$$13 + \underline{\hspace{1cm}} = 0$$

(c) 
$$12 + (-12) =$$

(d) 
$$(-4) + \underline{\hspace{1cm}} = -12$$

(e) \_\_\_\_\_ 
$$-15 = -10$$

Answer 1:

(a) 
$$(-8) + 8 = 0$$

**(b)** 
$$13 + (-13) = 0$$

(c) 
$$12 + (-12) = 0$$

(d) 
$$(-4) + (-8) = -12$$

(e) 
$$5 - 15 = -10$$

## Question 4:

Find:

(a) 
$$(-7)$$
 - 8 -  $(-25)$ 

**(b)** 
$$(-13) + 32 - 8 - 1$$

Answer 1:

(a) 
$$(-7)$$
 - 8 -  $(-25)$ 

$$= -7 - 8 + 25$$
  
 $= -15 + 25 = 10$ 

**(b)** 
$$(-13) + 32 - 8 - 1$$
  
=  $-13 + 32 - 8 - 1$ 

$$= 32 - 22 = 10$$

(c) 
$$(-7) + (-8) + (-90)$$

(d) 
$$50 - (-40) - (-2)$$

(c) 
$$(-7) + (-8) + (-90)$$

$$= -7 - 8 - 90 = -105$$

$$=50+40+2=92$$