

Exercise 6.1

1) write the Opposite of the following :

a) Increase in weight

Ans: Decrease in weight

~~c) 80 m east~~

Ans: ~~80 m~~ West

d) Loss of Rs. 700

Ans: Gain of Rs. 700

e) 100m above sea level

Ans: 100m below sea level.

2) Represent the following numbers as integers with appropriate signs.

b) A submarine is moving at a depth of eight hundred metre below the sea level.

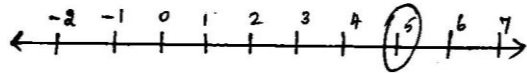
Ans: - 800

d) withdrawal of rupees seven hundred.

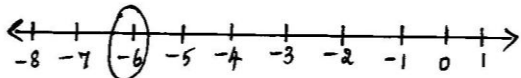
Ans: - 700

3) Represent the following numbers on a number line.

a) +5



e) -6



4) Adjacent figure is a vertical number line, representing integers observe it and locate the following points: [Diagram → Refer T.B.]

a) If Point D is +8, then which point is -8?

Ans: Point F is -8

c) write integers for points B and E

Point B is +4 ; Point E is -10

5. Following is the list of temperatures of five places in India on a particular day of the year  
(Do in text book)

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

c) 0, -1 Ans = 0, as 0 is > -1.

e) -6, 6 Ans = 6, as 6 is > -6

7) write all the integers between the given pairs.

b) -4 and 4.

Ans: -3, -2, -1, 0, 1, 2, 3

d) -30 and -23.

Ans: -29, -28, -27, -26, -25, -24

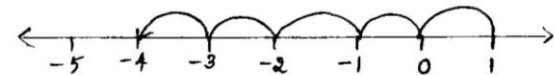
8) a) write four negative integers greater than -20

Ans: -19, -18, -17, -16

9) Do in book

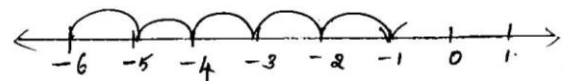
10) Draw a number line and answer the following:

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



Ans: we will reach -4

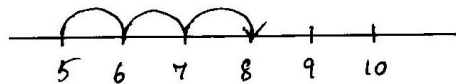
d) If we are at -6 on the number line, in which direction should we move to reach -1?



Ans: Right

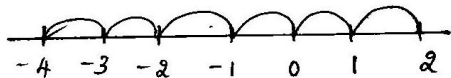
### Exercise 6.2

- 1) Using the number line write the integer which is  
a) 3 more than 5



Ans: 8

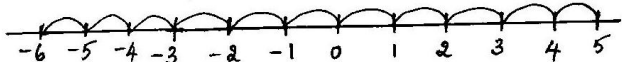
- c) 6 less than 2



Ans: -4

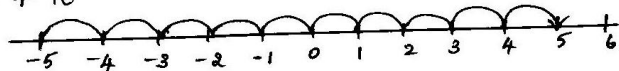
- 2) Use number line and add the following integers:

b)  $5 + (-11)$



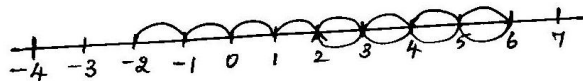
Ans: -6

d)  $(-5) + 10$



Ans: 5

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



Ans: 2

3. Add without using number line.

a)  $11 + (-7)$

Ans: 4

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

Ans: -100

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

Ans: -650

- 4) Find the sum of: (4)

a) 137 and -354

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

d) -50, -200 and 300

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

- 5) Find the sum:

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

$$37 - 2 - 65 - 8$$

$$37 - 75$$

Ans: -38

### Exercise 6.3

- 1) Find

b)  $72 - (90)$

$$\text{Ans} = -18$$

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

$$(-15) + 18$$

$$\text{Ans} = 3$$

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

$$(-32) + 40$$

$$\text{Ans} = 8$$

- 2) Fill in the blanks with  $>$ ,  $<$  or  $=$  sign.

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

$$-3 - 6$$
 \_\_\_\_\_  $-3 + 6$

$$-9 < 3$$

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

$$-25 + 42$$
 \_\_\_\_\_  $-42 + 25$

$$+17 > -17$$

3) Fill in the blanks:

a)  $(-8) + \underline{\quad} = 0$

Ans: 8

c)  $12 + (-12) = \underline{\quad}$

Ans = 0

e)  $\underline{\quad} - 15 = -10$

Ans: 5

4) Find

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

$(-7) - 8 + 25$

$-15 + 25$

Ans: 10

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

$-7 - 8 - 90$

Ans -105

INTEGERS

(b)

HOTS:-

1. A place is 37m above sea level and another is 35 below sea level. What is the difference of level between the two places?

Soln Above sea level = +37m

Below sea level = -35m

Difference of level between the two places =  $(+37) - (-35)$

$= +37 + 35$

$= +72m$

Ans: Difference of level between the two places = +72m.

2. Find the value of

a)  $|15 - 18|$

Soln  $= |15 - 18|$

$= |-3|$

$= 3$

Ans: 3

b)  $-|9 - 13|$

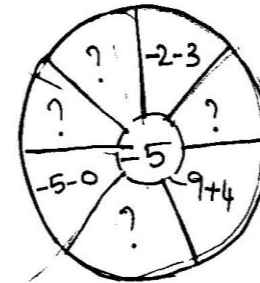
Soln  $= -|9 - 13|$

$= -|4|$

$= -4$

Ans: -4

3. Each expression between the consecutive spokes of a cycle wheel represents the integer at the centre of the wheel. Complete the following wheels.



Soln

