

Chapter - 4 Integers

Exercise - 4.1

① Write two examples from day to day life in which we can use positive and negative integers.

(a) Earning and spending

(b) for money deposit and withdrawals

② Write the opposite of the following:

(a) A PROFIT of ₹ 500 - A LOSS of ₹ 500

(b) A WITHDRAWAL of ₹ 70 from bank account - A DEPOSIT of ₹ 70 to bank account

(c) A DEPOSIT of ₹ 1000 - A WITHDRAWAL of ₹ 1000

(d) 326 B.C - 326 A.D

(e) 500m BELOW sea level - 500m ABOVE sea level

(f) 25° ABOVE 0°C - 25° BELOW 0°C

③ Represent the situations mentioned in Q2 in integers.

(a) A PROFIT of ₹ 500 → +500

(b) A WITHDRAWAL of ₹ 70 from bank account → -70

(c) A DEPOSIT of ₹ 1000 → +1000

(d) 326 B.C → -326

(e) 500m BELOW sea level → -500m

(f) 25° ABOVE 0°C → +25

(4) Represent the following situations in integers.

(a) A DEPOSIT of ₹500 $\rightarrow +500$

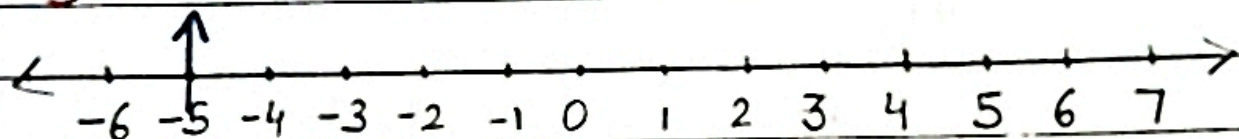
(b) An aeroplane is flying at a height
Two thousand meter ABOVE the sea level $\rightarrow +2000$

(c) A WITHDRAWAL of ₹700 from bank account $\rightarrow -700$

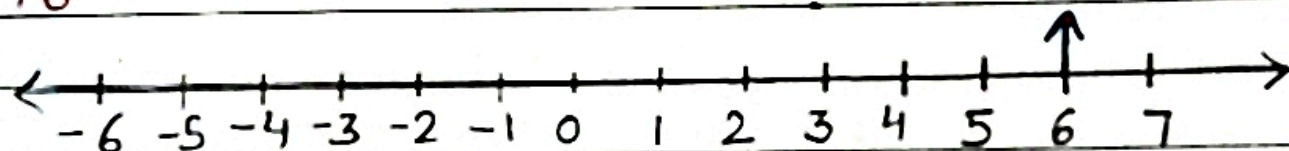
(d) A diver dives to a depth of 6 feet
BELOW ground level. $\rightarrow -6$

(5) Represent the following numbers on number line.

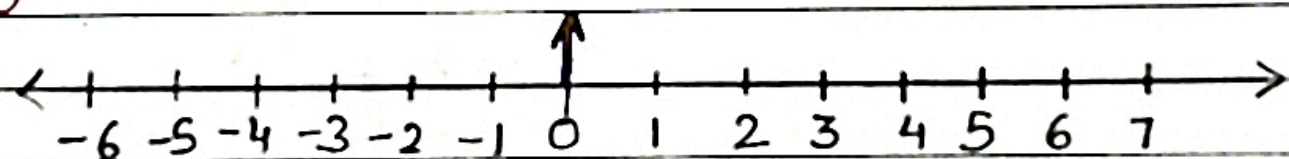
(a) -5



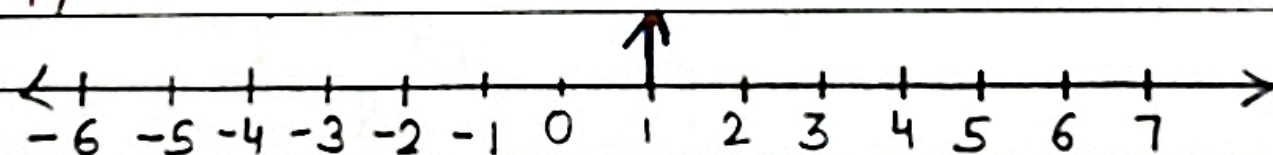
(b) +6



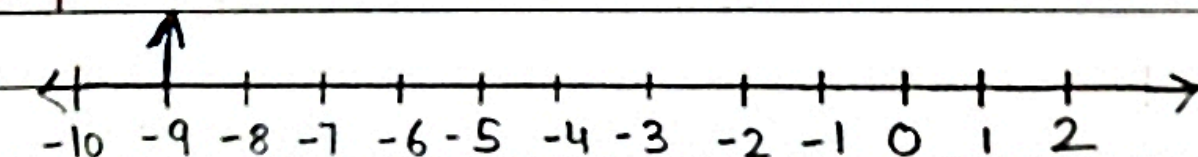
(c) 0



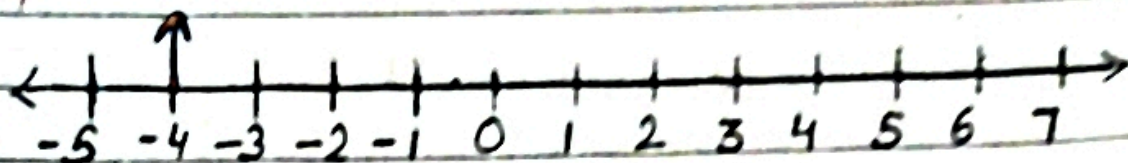
(d) +1



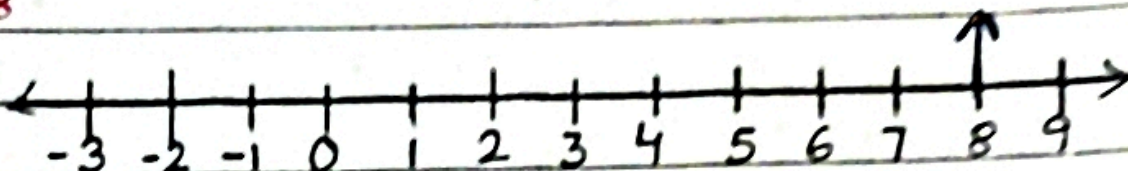
(e) -9



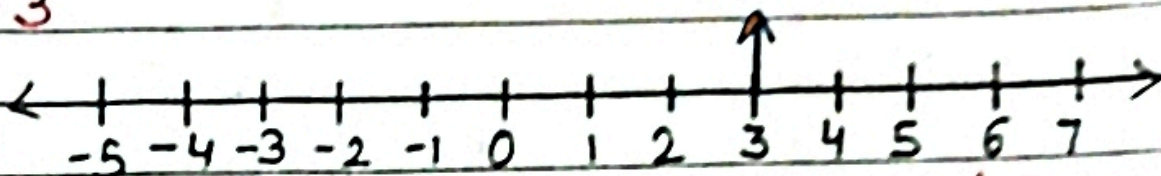
(f) -4



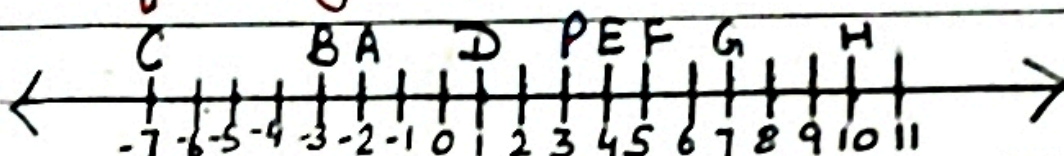
(g) $+8$



(h) $+3$



(6) Integers are represented on a horizontal number line as shown. Where A represents -2 . With reference to the number line, answer the following questions:



A represents -2

(a) Which point represent -3 ?

B represents -3 .

(b) Locate the point which represents the opposite of B and name it P.

$B = -3$. Opposite of -3 is $+3$. P represents $+3$.

(c) Write integers for the points C and E.

$C = -7$, $E = +4$

(d) Which point marked on the number line has the least value?

$C = -7$ has the least value.

(7) In each of the following pairs, which number is to the right of others on the number line?

(a) 2, 9

9 lies to the right on the number line. (9 > 2)

(b) -3, -8

-3 lies to the right on the number line. (-3 > -8)

(c) 0, -5

0 lies to the right on the number line. (0 > -5)

(d) -11, 10

10 lies to the right on the number line. (10 > -11)

(e) -9, 9

9 lies to the right on the number line. (9 > -9)

(f) 2, -200

2 lies to the right on the number line. (2 > -200)

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

(a) 0 and -6

-5, -4, -3, -2, -1 are the integers between 0 and -6.

(b) -6 and +6

-5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5 are the integers between -6 and +6.

(c) -9 and -17

$-16, -15, -14, -13, -12, -11, -10$ are the integers between -9 and -17 .

(d) -19 and -5

$-18, -17, -16, -15, -14, -13, -12, -11, -10, -9, -8, -7, -6$ are the integers between -19 and -5 .

(16) Write five integers GREATER than -15 .
 $-14, -13, -12, 0, 1$ are the integers GREATER than -15 .

(b) Write five integers SMALLER than -20 .
 $-21, -22, -23, -24, -25$ are the integers SMALLER than -20 .

(c) Write five integers GREATER than 0 .
 $1, 2, 3, 4, 5$ are the integers GREATER than 0 .

(d) Write five integers SMALLER than 0 .
 $-1, -2, -3, -4, -5$ are the integers SMALLER than 0 .

(10) Encircle the greater integer in each given pair.

(a) $-5, -7$

-5 $\boxed{>}$ -7

Greater Integer = -5

(b) 0, -3

$$0 \boxed{>} -3$$

Greater Integer = 0

(c) 5, 7

$$5 \boxed{<} 7$$

Greater Integer = 7

(d) -9, 0

$$-9 \boxed{<} 0$$

Greater Integer = 0

(e) -9, -11

$$-9 \boxed{>} -11$$

Greater Integer = -9

(f) -4, 4

$$-4 \boxed{<} 4$$

Greater Integer = 4

(g) -10, -100

$$-10 \boxed{>} -100$$

Greater Integer = -10

(h) 10, 100

$$10 \boxed{<} 100$$

Greater Integer = 100

(11) Arrange the following integers in ASCENDING order:

(a) 0, -7, -9, 5, -3, 2, -4

In ASCENDING Order:

-9, -7, -4, -3, 0, 2, 5

(b) 8, -3, 7, 0, -9, -6

In ASCENDING Order:

-9, -6, -3, 0, 7, 8

(12) Arrange the following integers in DESCENDING Order:

(a) -9, 3, 4, -6, 8, -3

In DESCENDING Order:-

8, 4, 3, -3, -6, -9

(b) 4, 8, -3, -2, 5, 0

In DESCENDING Order:-

8, 5, 4, 0, -2, -3