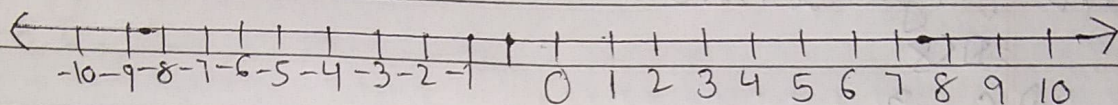


(W
12.5.2)

Ch-7

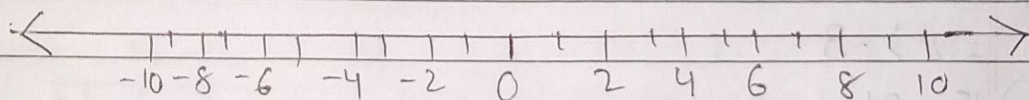
Number Line



Note: Zero is greater than any negative integer.
For example - $0 > -7$, $0 > -1000$.

Exercise 7(A)

1. Fill in the blanks using the following number line:



- i) An integer, on the given number line is greater than every number on its left.
- ii) An integer on the given number line is greater than every number to its left.
- iii) 2 is greater than -4 implies 2 is to the right of -4.
- iv) -3 is smaller than 2 and 3 is greater than ~~8~~ -2.
- v) -4 is greater than ~~8~~ and ~~4~~ is smaller than ~~8~~.
- vi) 5 is greater than 2 and -5 is smaller than -2.
- vii) -6 is smaller than 3 and the opposite of -6 is greater than opposite of 3.
- viii) 8 is greater than -5 and -8 is smaller than 5.

2. In each ~~case~~ of the following pairs, state which integer is greater

i) -15, -23

Ans - -15 is greater than -23
 $= -15 > -23$

ii) -12, 15

Ans - 15 is greater than -12
 $= -12 < 15$

iii) 0, 8

Ans- 8 is greater than 0
= $0 < 8$

iv) 0, -3

Ans- 0 is greater than -3
= $0 > -3$

3. In each of the following pairs, state which integer is smaller:

i) 0, -6

Ans- -6 is smaller than 0
= ~~$0 < -6$~~ $0 > -6$

ii) 2, -3

Ans- -3 is smaller than 2
= $2 > -3$

iii) 15, -51

Ans- -51 is smaller than 15
= $15 > -51$

iv) 13, 0

Ans- 0 is smaller than 13
= $13 > 0$

4. In each of the following pairs replace * with $<$ or $>$ to make the statement true.

i) $3^* 0$

Ans- $3 > 0$

ii) $0^* -8$

Ans- $0 > -8$

iii) $-9^* -3$

Ans- $-9 < -3$

iv) $-3^* 3$

Ans- $-3 < 3$

v) $5^* -1$

Ans- $5 > -1$

vi) $-13^* 0$

Ans- $-13 < 0$

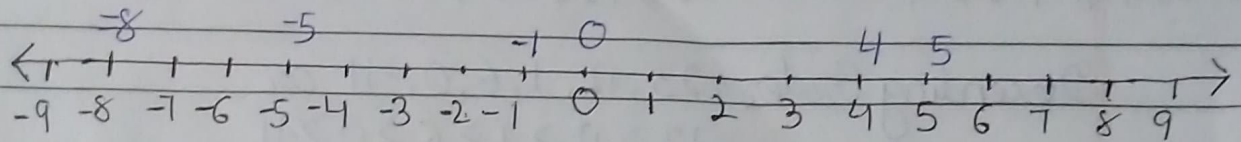
vii) $-8^* -18$

Ans- $-8 > -18$

5. In each case arrange the given integers in ascending order, using a number line.

i) $-8, 0, -5, 5, 4, -1$

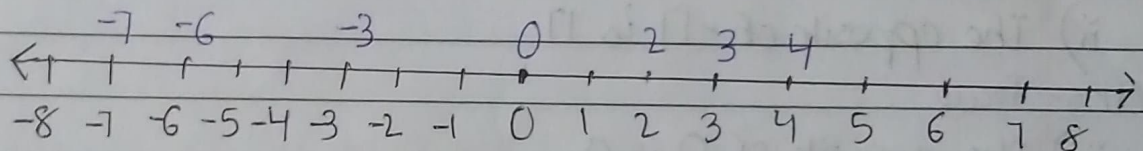
Ans-



Ascending order = $-8, -5, -1, 0, 4, 5$ or
 $= -8 < -5 < -1 < 0 < 4 < 5$

ii) $3, -3, 4, -7, 0, -6, 2$

Ans-

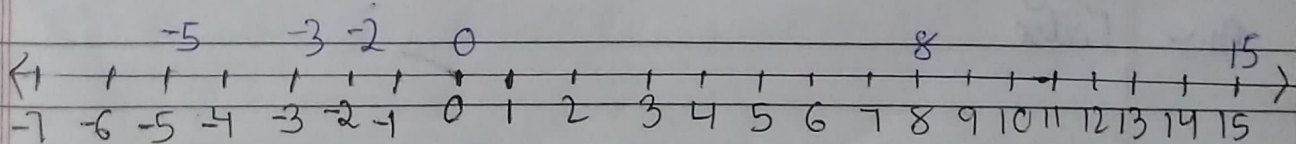


Ascending order = $-7, -6, -3, 0, 2, 3, 4$ or
 $= -7 < -6 < -3 < 0 < 2 < 3 < 4$

6. In each case arrange the given integers in descending order, using a number line.

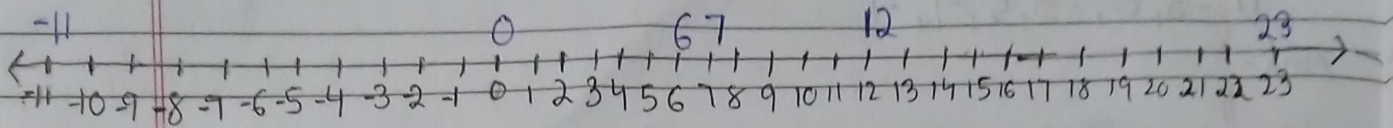
i) $-5, -3, 8, 15, 0, -2$

Ans-



Descending order = $15, 8, 0, -2, -3, -5$ or
 $= 15 > 8 > 0 > -2 > -3 > -5$

ii) 12, 23, -11, 0, 7, 6



Descending Order = 23, 12, 7, 6, 0, -11 or
 $= 23 > 12 > 7 > 6 > 0 > -11$

7. For each of the statements given below state whether it is true or false.

i) The smallest integer is 0

Ans- False

ii) The opposite of -17 is 17

Ans- True

iii) The opposite of 0 is 0

Ans- True

iv) Every negative integer is smaller than 0.

Ans- True

v) 0 is greater than every positive number

Ans- False

vi) Since zero is neither negative nor positive it is not an integer

Ans- False