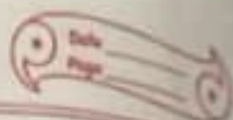


Chapter-7

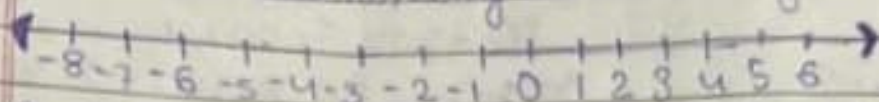


Number line

Exercise 7(A)

Evaluation Question

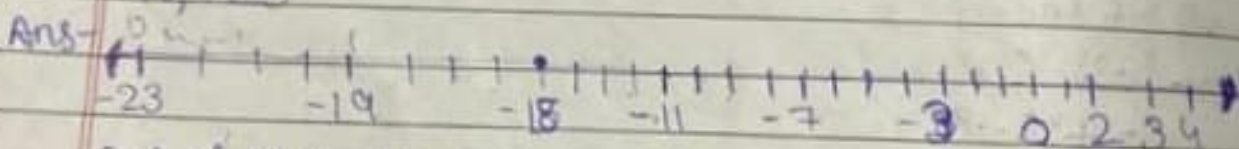
1- Fill in the blanks, using the following number line.



- 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~~ <sup>less</sup> than 2 and 3 is greater than -2.
- v- -4 is greater than -8 and 4 is ~~smaller~~ <sup>less</sup> than 8.
- vi- 5 is greater than 2 and -5 is ~~smaller~~ <sup>less</sup> than -2.
- vii- -6 is ~~smaller~~ <sup>less</sup> than 3 and the opposite of -6 is greater than opposite of 3.
- viii- 8 is greater than -5 and -8 is ~~smaller~~ <sup>less</sup> than 5.

2- In each of the following pairs, state which integer is greater:

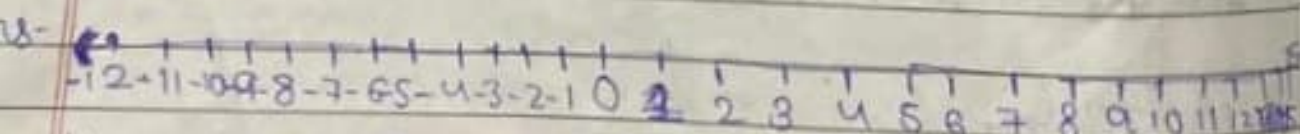
i- -15, -23



Out of these any two number, marked on the above number line, and the number which is to the right is greater, to the left it's smaller.

Considering the number line drawn: -15 is greater than -23.

ii- -12, 15



Here, in the above shown number line -12 is to the left most in number line, and 15 is at the right most. So, considering the above number line: 15 is at the right most, so 15 is greater.

III - 0, 8

Ans. Here, 8 is greater.

IV - 0, -3

Ans. 0 is greater than -3, and 0 is in the right of -3

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

i - 0, -6

Ans. Mark one of these numbers in the number line



So, the number which is on the right is greater, and the number which is on the left is smaller.

As per, the number, 0 is on the left. So, -6 is smaller.

ii - 2, -3

Ans. -3 is smaller.

NOTE: Zero is greater than any negative number/integer

$$0 > -7, 0 > -1000$$

iii - 15, -51

Ans. -51 is smaller than 15

iv - 13, 0

Ans. And here, 13 is greater

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

i -  $3 * 0 > 3 > 0$

Ans -  $0 * -8 > 0 > -8$

iii -  $-9 * -3 > -3 > -9$

iv -  $-3 * 3 > 3 > -3$

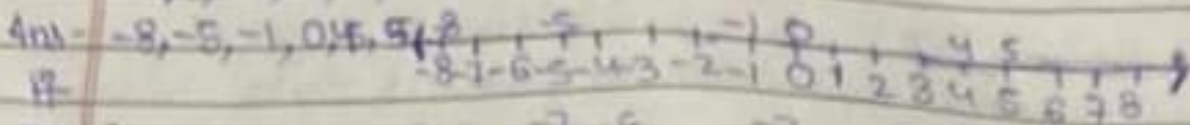
v -  $5 * -1 > 5 > -1$

vi -  $-13 * 0 > 0 > -13$

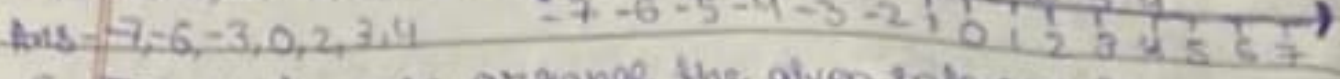
vii -  $-8 * -18 > -8 > -18$

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

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



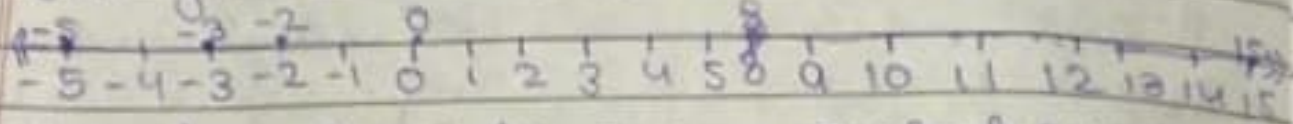
ii-  $3, -3, 4, -7, 0, -6, 2$



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

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

Ans- Draw a suitable number line and on it the given number, as shown below:

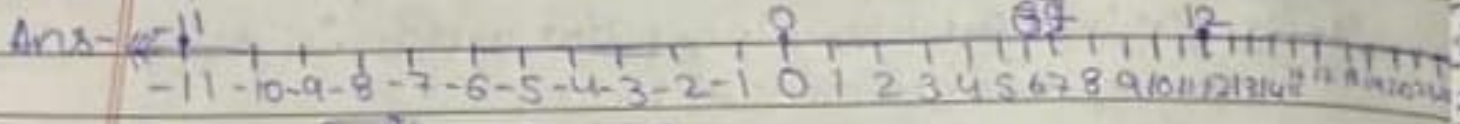


Since, descending order, means greater to smaller.

∴ The numbers in descending order:

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

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



$23, 12, 7, 6, 0, -11$

7- For each of the statements given, state whether true or false

i- The smallest integer is 0 - False

ii- The opposite of -17 is 17 - True

iii- The opposite of zero is zero - True

iv- Every negative integer is smaller than 0 - True

v- 0 is greater than every positive number - False

∴ Since zero is neither negative nor positive, it is an integer - False