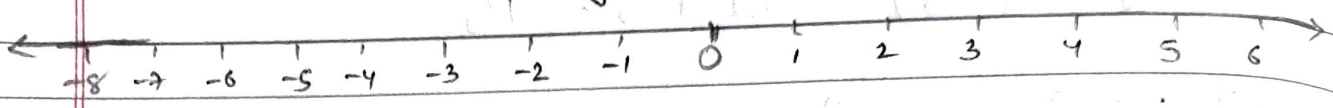
NUMBER LINE

CH-7

Ex-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 less than 2 and 3 is greater than -2.

v) -4 is greater than -8 and 4 is less than 8.

vi) 5 is greater than 2 and -5 is less than -2.

vii) -6 is less than 3 and the opposite of -6 is greater than opposite of 3.

viii) 8 is greater than -5 and -8 is less than 5.

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

(i) -15, -23

$\boxed{-15} > -23$

(ii) $-12, 15$

$-12 < 15$

(iii) $0, 8$

$0 < 8$

(iv) $0, -3$

$0 > -3$

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

(i) $0, -6$

$-6 < 0$

(ii) $2, -3$

$-3 < 2$

(iii) $15, -51$

$-51 < 15$

(iv) $13, 0$

$0 < 13$

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

(i) $3 * 0$

$3 > 0$

(ii) $0 * -8$

$0 > -8$

(iii) $-9 * -3$

$-3 > -9$

(iv) $-3 * 3$

$3 > -3$

(v) $5 * -1$

$5 > -1$

(vi) $-13 * 0$

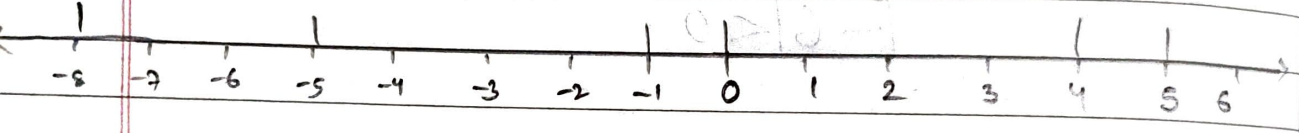
$0 > -13$

(vii) $-8 * -18$

$-8 > -18$

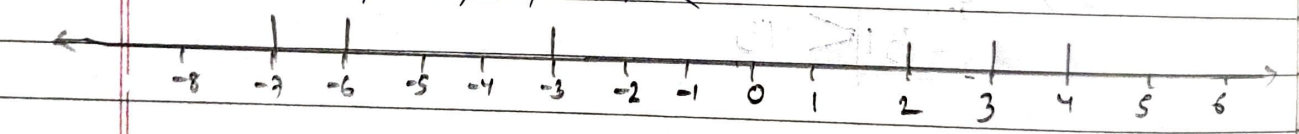
5. In each case, arrange the given integers in ascending order, using a number line:

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



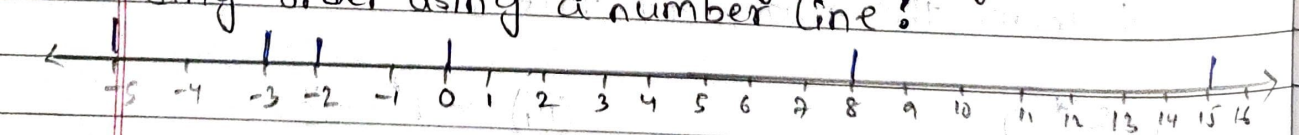
$-8 < -5 < -1 < 0 < 4 < 5$

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



$-7 < -6 < -3 < 0 < 2 < 3 < 4$

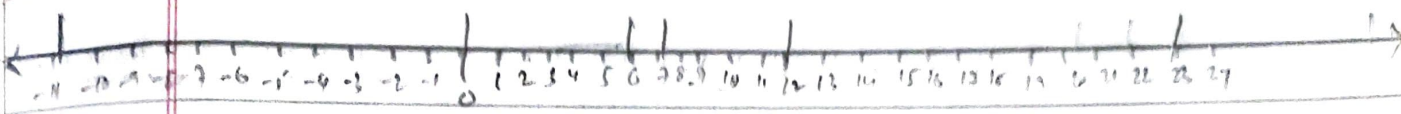
6. In each case arrange the given integers in decending order using a number line:



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

$15 > 8 > 0 > -2 < -3 < -5$

(ii) 12, 23, −11, 0, 7, 6



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

7. For each of the statements given below, state whether it is 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 integer. False

(vi) Since zero is neither negative nor positive, it is not an integer. False.