

NUMBER LINE

SUBJECT : MATHEMATICS

CHAPTER NUMBER: 07

CHAPTER NAME :Number Line

**SUBTOPIC :Number lines for Natural numbers, Whole numbers
and Integers**

PERIOD NO: 1

CHANGING YOUR TOMORROW

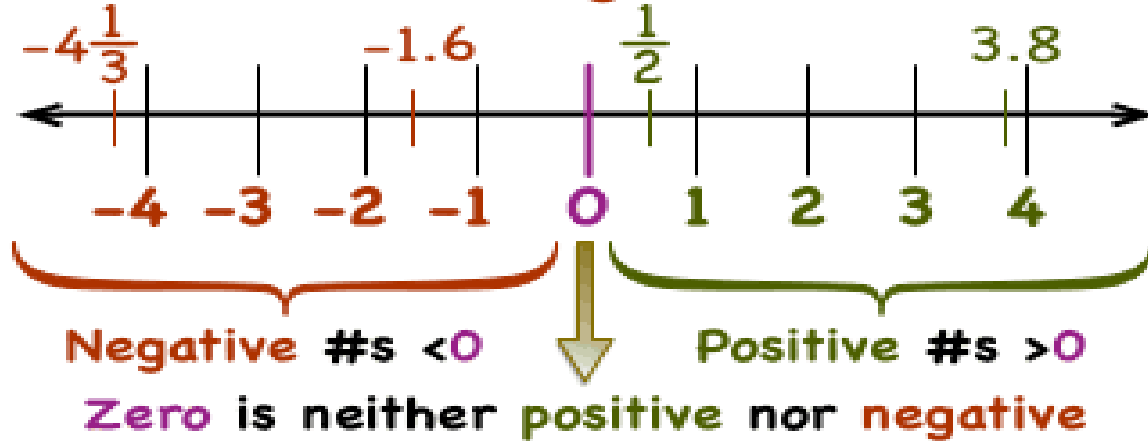
Learning outcomes

- Students will be able to draw number line.
- Students will be able to represent Natural numbers Whole Numbers and Integers on number line .

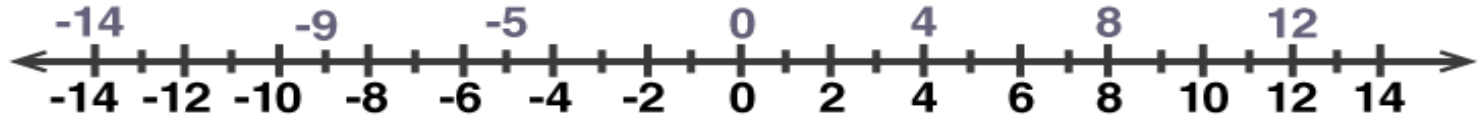
Negative numbers and Integers

- Students will learn number line with the help of a video .
- <https://www.youtube.com/watch?v=o3kli8g3mwl>

Positive and Negative Numbers



Number Line



Evaluation Question

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

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

Evaluation Question

- (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 on 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

Evaluation Question

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

(i) $-15, -23$

(ii) $-12, 15$

(iii) $0, 8$

(iv) $0, -3$

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

(i) $0, -6$

(ii) $2, -3$

(iii) $15, -51$

(iv) $13, 0$

Evaluation Question

Solution: (i) -15, -23

-15 lies on the right side of -23 on the number line. Therefore, -15 is greater than -23

(ii) -12, 15

15 lies on the right side of -12 on the number line. Hence, 15 is greater than -12

(iii) 0, 8

8 lies on the right side of 0 on the number line. Therefore, 8 is greater than 0

(iv) 0, -3

0 lies on the right side of -3 on the number line. Hence, 0 is greater than -3

Evaluation Question

3.Ans:

- (i) -6 lies on the left side of 0 on the number line. Hence, -6 is smaller than 0
- (ii) -3 lies on the left side of 2 on the number line. Therefore, -3 is smaller than 2
- (iii) -51 lies on the left side of 15 on the number line. Hence, -51 is smaller than 15
- (iv) 0 lies on the left side of 13 on the number line. Therefore, 0 is smaller than 13

Evaluation Question

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

(i) $3 * 0$

(ii) $0 * - 8$

(iii) $- 9 * - 3$

(iv) $- 3 * 3$

(v) $5 * - 1$

(vi) $- 13 * 0$

(vii) $- 8 * - 18$

Evaluation Question

Solution:

(i) 3 lies on the right side of 0 on the number line $\Rightarrow 3 > 0$

Hence, 3 is greater than 0

(ii) 0 lies on the right side of -8 on the number line $\Rightarrow 0 > -8$

Therefore, 0 is greater than -8

(iii) -9 lies on the left side of -3 on the number line $\Rightarrow -9 < -3$

Hence, -9 is smaller than -3

Additional Homework

1. Replace * in each of the following by < or > or = that the statement is true:

(i) $2 * 5$

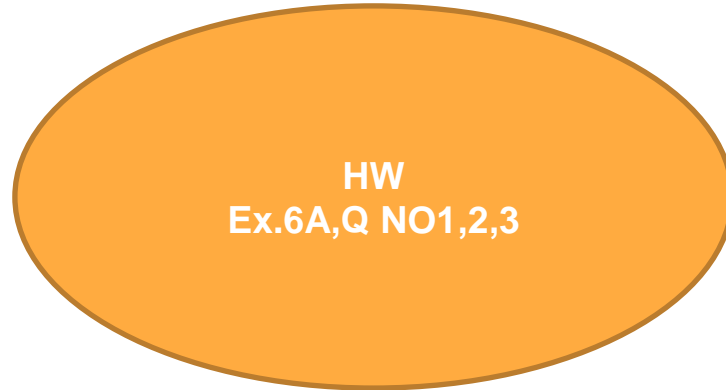
(ii) $0 * 3$

(iii) $0 * - 7$

(iv) $- 18 * 15$

(v) $- 235 * - 532$

(vi) $- 20 * 20$



THANKING YOU
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