

NEGATIVE NUMBERS AND INTEGERS

SUBJECT : MATHEMATICS

CHAPTER NUMBER: 06

**CHAPTER NAME : NEGATIVE NUMBERS AND
INTEGERS**

**SUBTOPIC : Integers, Representation of Integers on
Number Line**

PERIOD NO: 1

CHANGING YOUR TOMORROW

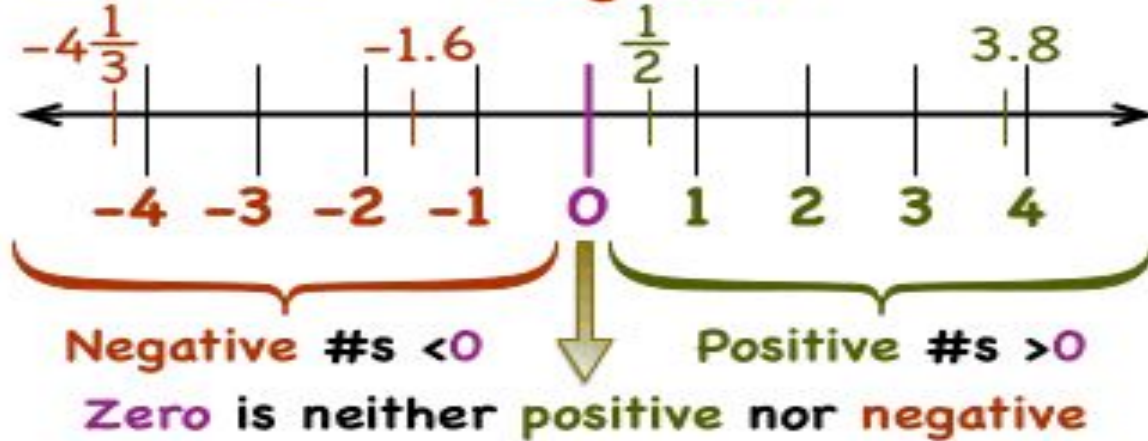
Learning outcomes

- Students will be able to connect negative numbers in daily life in .
- Students will develop application skill.
- Students will be able to represent negative numbers on number line .

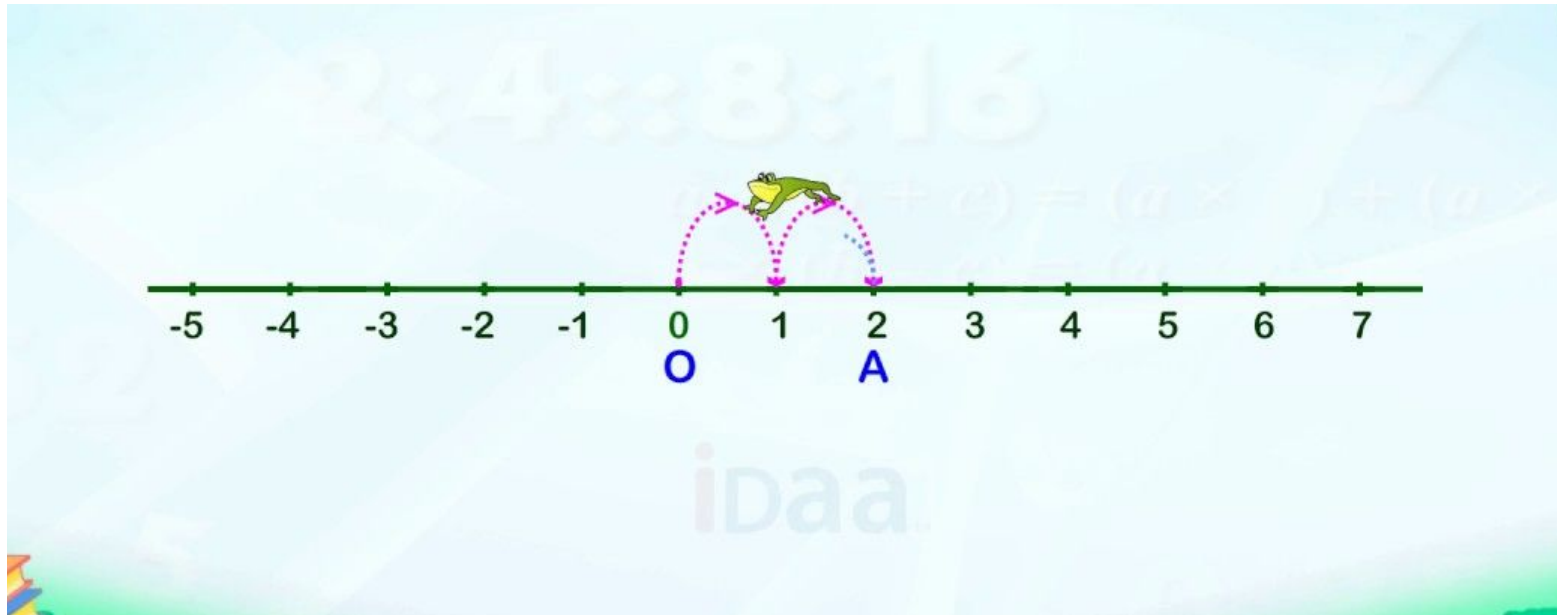
Negative numbers and Integers

- Students will Learn negative numbers and integers with the help of a video .
- <https://www.youtube.com/watch?v=3i2i9nmkG24>(7.30)

Positive and Negative Numbers



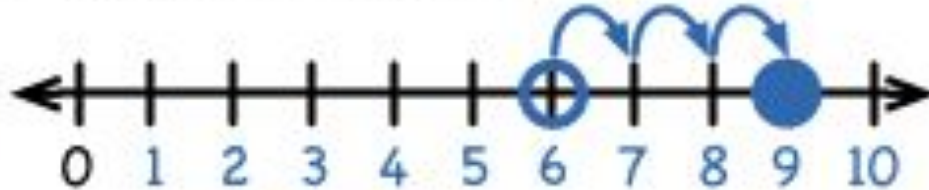
Number Line



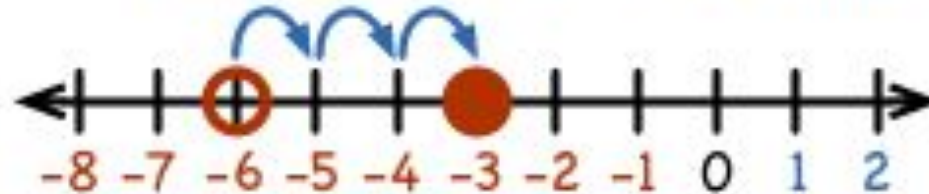
Number Line

Find the Sum:

$$6 + 3 = 9$$



$$-6 + 3 = -3$$



$$-6 + (-3) = -9$$



Evaluation Question

1. Fill in the blanks:

(i) Negative of -20 is

(ii) Negative of 0 is

(iii) Negative of 8 is

(iv) If 10 represents gain of ₹ 10, then -10 represents

(v) If going south is negative then going north is

(vi) Because $5 < 7$, therefore -5 -7.

(vii) If $3 > -2$, then 3 is on the of - 2.

(viii) If $-8 < -6$, then -8 is on the of -6.

Evaluation Question

- i) Negative of -20 is 20
- (ii) Negative of 0 is 0
- (iii) Negative of 8 is -8
- (iv) If 10 represents gain of ₹ 10, then -10 represents loss of ₹ 10
- (v) If going south is negative then going north is positive
- (vi) Because $5 < 7$, therefore -5 greater than -7
- (vii) If $3 > -2$, then 3 is on the right side of -2
- (viii) If $-8 < -6$, then -8 is on the left side of -6

Evaluation Question

2. Use a number line to write the following integers in ascending (increasing) order:

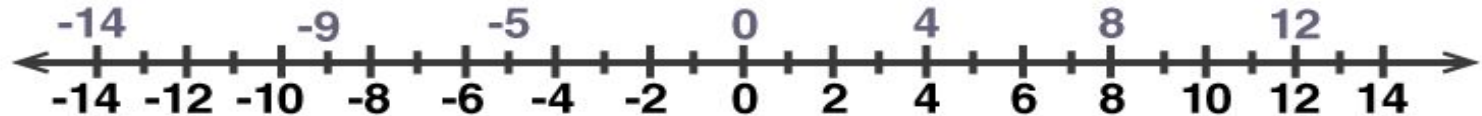
(i) -5, 8, 0, -9, 4, -14 and 12

(ii) -6, 7, 0, -9, 5 and 9

Solution:

(i) -5, 8, 0, -9, 4, -14 and 12

Draw a number line for given integers and mark on it all the integers as shown below



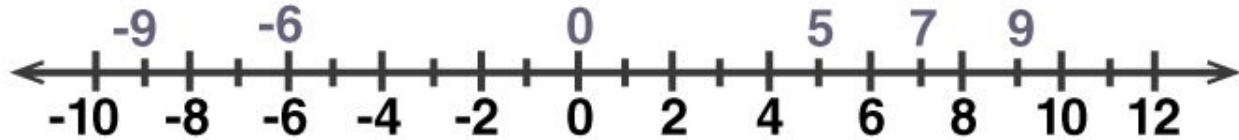
Evaluation Question

Hence, the given integers in the ascending order are:

$$-14 < -9 < -5 < 0 < 4 < 8 < 12$$

(ii) -6, 7, 0, -9, 5 and 9

Draw a number line for given integers and mark on it all the integers as shown below



Hence, the given integers in the ascending order are:

$$-9 < -6 < 0 < 5 < 7 < 9$$

3. Use a number line to write the following integers in descending (decreasing) order:

(i) -10, 0, 3, -4, 12, 11, -1 and 5

(ii) -4, 3, -8, -12, -7 and 6

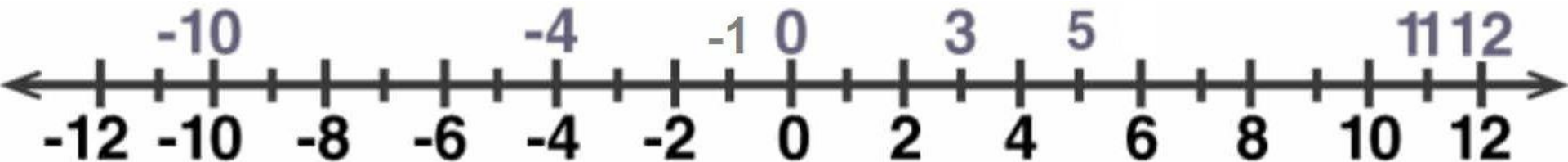
Evaluation Question

(i) -10, 0, 3, -4, 12, 11, -1 and 5

Draw a number line for the given integers and mark on it all the integers as shown below

Hence, the given integers in the descending order are:

$12 > 11 > 5 > 3 > 0 > -1 > -4 > -10$



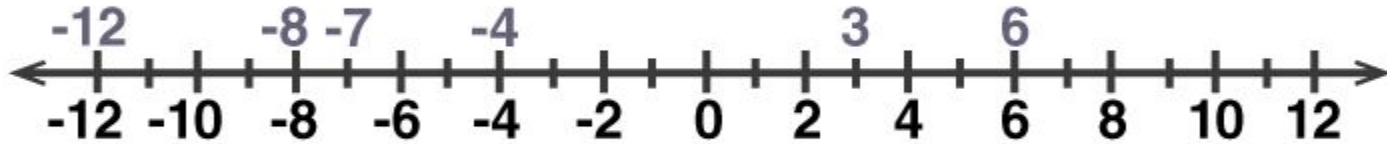
Evaluation Question

(ii) -4, 3, -8, -12, -7 and 6

Draw a number line for the given integers and mark on it all the integers as shown below

Hence, the given integers in the descending order are:

$$6 > 3 > -4 > -7 > -8 > -12$$



Additional Homework

1. How many integers are between?

(i) - 4 and 3

(ii) 5 and 12

(iii) - 9 and - 2

(iv) 0 and 5

HW
Ex.6,Q NO1,2,3

THANKING YOU
ODM EDUCATIONAL GROUP