

**MONTH : NOVEMBER**

**SESSION : 12**

**CLASS : V**

**SUBJECT : MATHEMATICS**

**CHAPTER NUMBER: 14**

**CHAPTER NAME : INTRODUCTION TO NEGATIVE NUMBERS**

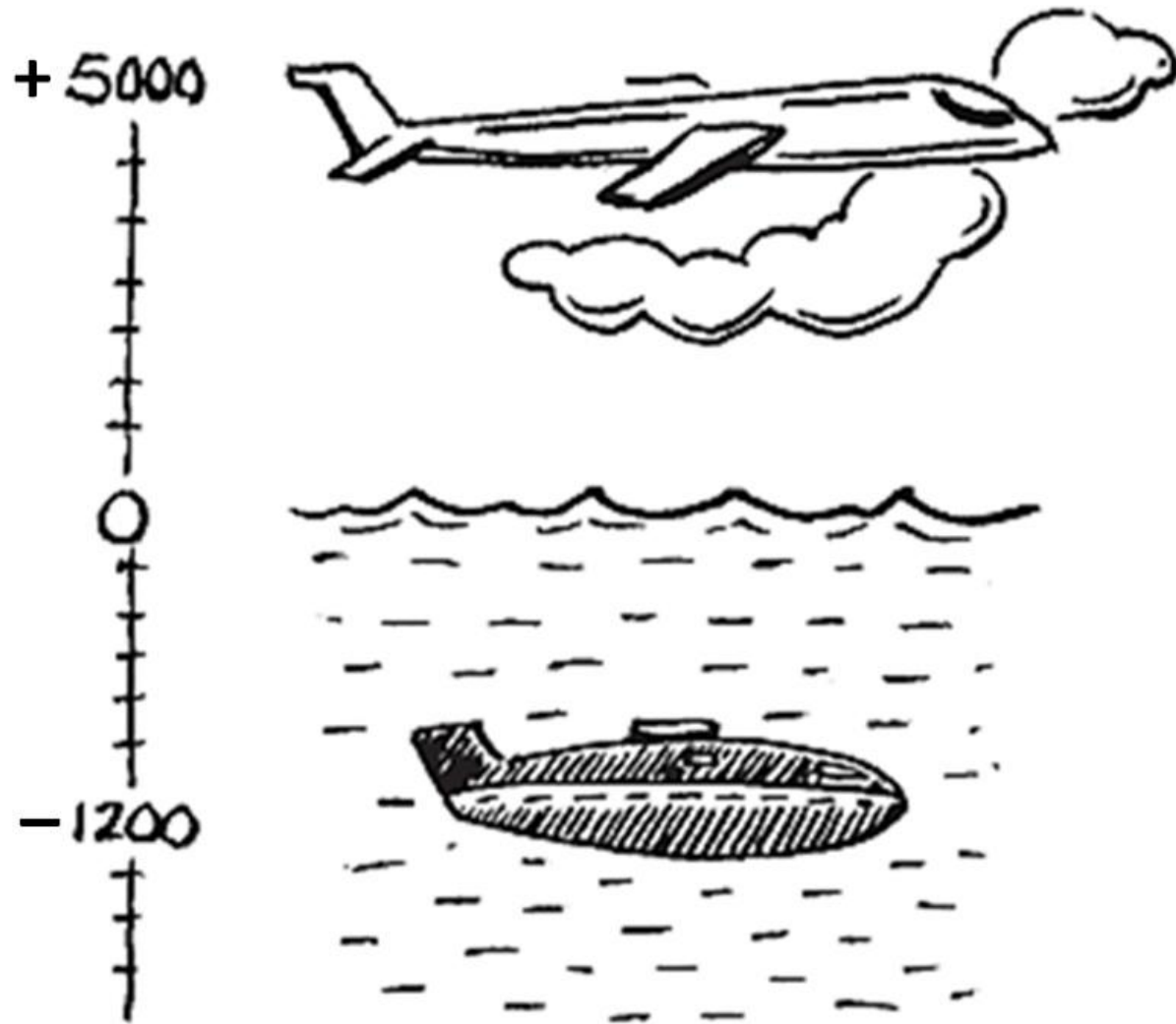
**SUB-TOPIC : INTRODUCTION & REPRESENTATION OF NEGATIVE  
NUMBERS ON NUMBER LINE.**

**CHANGING YOUR TOMORROW**

## **LEARNING OBJECTIVE :**

### **Enable the students**

- **To recognize negative numbers**
- **To represent negative numbers on number line.**

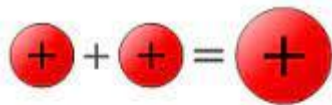


# CONCEPT OF NUMBERS:

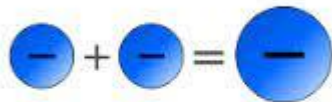
**1. Natural numbers:** Numbers used to count natural things. Ex: 1,2,3,4,5,6...

**2. Whole number:** ZERO added to the natural numbers are whole numbers. Ex: 0,1,2,3,4,5,6...

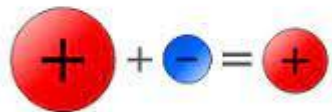
**3. Integers/ Negative numbers:** When a greater number is subtracted from a smaller number , the answer is a negative number.



$$+ + = +$$



$$- + - = -$$



$$+ + - = +$$

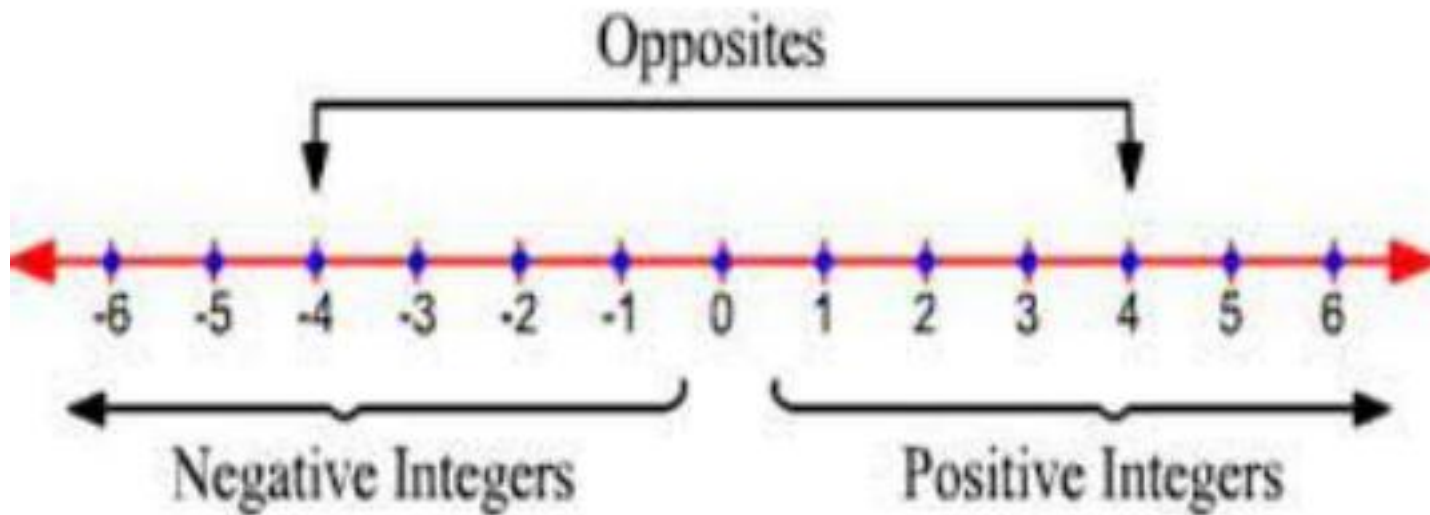


$$+ + - = -$$

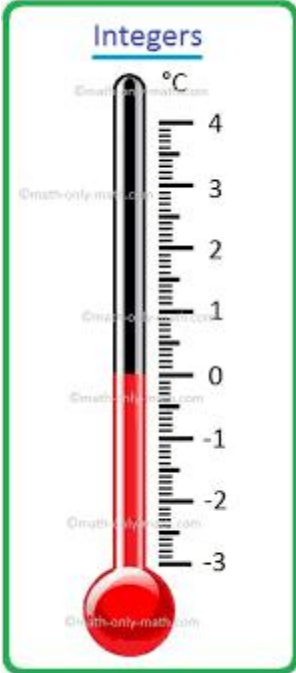
Ex:  $10 - 6 = 4$

$6 - 10 = -4$

## REPRESENTATION OF NEGATIVE NUMBERS ON NUMBER LINE



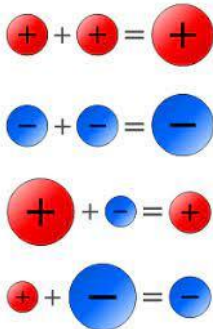
**DAILY LIFE USE OF NEGATIVE INTEGERS.**



**TEMPERATURE**



**HEIGHT ABOVE THE SEA LEVEL**



## EXERCISE 14 (A)

5. Write the negative integers of the following

a.  $-12 = +12$

b.  $6 = -6$

c.  $0 = 0$

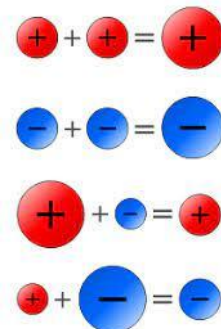
d.  $-7 = +7$

e.  $-4 = +4$

f.  $-10 = +10$

g.  $8 = -8$

h.  $4 = -4$



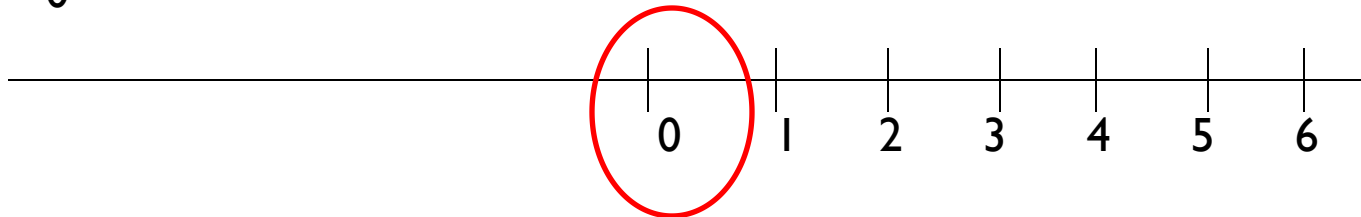
## EXERCISE 14 (A)

6. Mark the following integers on the number line

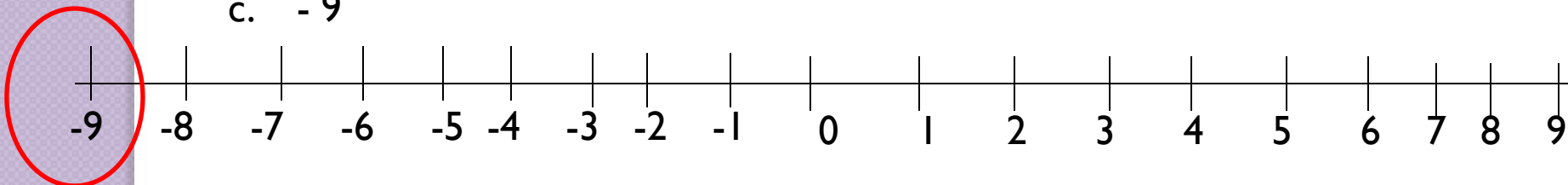
a. -6



b. 0



c. -9

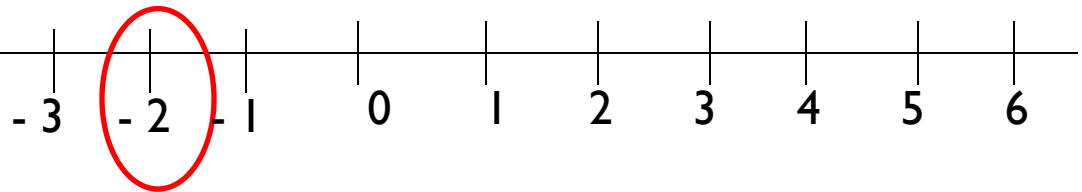




## EXERCISE 14 (A)

6. Mark the following integers on the number line

d. - 2



7. How many integers are in between?

a. - 5 and 2 = -4 , -3 , -2 , -1 , 0 , 1 = **6 integers**

b. 4 and 11 = **6 integers**

## EXERCISE 14 (A)

7. How many integers are in between?

c. - 3 and - 10 = **6 integers**

d. - 5 and +5 = **9 integers**

8. Write all integers in between

a. - 2 and +7 = **-1 , 0 , 1 , 2, 3 , 4 , 5 , 6**

b. - 4 and +4 = **-3 , - 2 , -1 , 0 , 1 , 2, 3**

## EXERCISE 14 (A)

8. Write all integers in between

c. 0 and  $-5 = -4, -3, -2, -1, 0$

d. 2 and 9 =  $3, 4, 5, 6, 7, 8$

9. Indicate the following using integers

a. Loss of Rs. 90 =  $-90$

b. Profit of Rs. 48 =  $+48$

c. 5 km above the ground level =  $+5$

d. 2 km below water level =  $-2$

## EXERCISE 14 (A)

9. Indicate the following using integers

e.  $22^{\circ}$  above zero = **+ 22**

f.  $3^{\circ}$  below zero = **- 3**

10. Find the opposite of the following

a. A profit of rs. 700 = **A loss of Rs. 700**

b.  $- 13$  = **+ 13**

c.  $27$  = **- 27**

d. Going south = **Going North**

The logo for 'Learning Outcomes' features the words 'Learning' and 'Outcomes' in a large, bold, black font with a yellow outline. To the left of the text is a blue graduation cap. Above the word 'Learning' is a red apple with a green leaf.

# Learning Outcomes

## Students are able:

- To recognize negative numbers
- To represent negative numbers on number line.

**THANKING YOU**  
**ODM EDUCATIONAL GROUP**