

INTRODUCTION OF INTEGERS WORKSHEET

Ass. Date : 03/09/14

Name

Sub.Date : 10/09/14

Subject: Mathematics

Standard: 6 TU

2014-2015

What are we going to learn.....

Make a new booklet and write all points which are discussed in class. (class notes)

⇒ **The need for new numbers:**

- 1) when we want to say temperature above zero and below zero.
- 2) When a businessman want to show his profit and los
- 3) Show the direction (Which are equal and opposite)
- 4) Height below and above sea level

⇒ **Directed Numbers**

+2 AND -5 are read as positive two and negative five and are called directed numbers

⇒ **Extending a number line**

⇒ **Numbers on the left and right on the number line**

⇒ **Order of numbers on number line**

⇒ **Order of number in the left and right of the number line**

⇒ **Is zero a positive or a Negative Number?**

⇒ **Opposite numbers on number line:**

⇒ **Another name for opposite numbers- Additive Inverse**

⇒ **Ordering of integers**

⇒ **Successor and predecessor of numbers**

⇒ **Absolute value**

⇒ **Image of a number**

⇒ **Negative of a negative integer**

⇒ **Showing changes on number line**

Now solve the following sums:

1. Write any five statements which will need positive integers to indicate.
2. Write any five statements which will need negative integers to indicate.

3. How will you read the following directed numbers (integers)

(a) +4 (b) - 8 (c) +14 (d) -90 (e) -104

4. Indicate the following by using integers:

(a) Temperature of 28°C (b) Height of place 35 km down the sea level

(c) A loss of Rs 350 in a transaction (d) Gaining a weight of 2 kg

(e) A Withdrawal of Rs 2000 from bank account

(f) 4°C below zero (g) Earning Rs 6000

(h) Win by 45 runs (i) Going 3 floors down in the lift

5. Is 0 a positive or negative integer? (Write Yes/No)

6. Draw a number line and show on it the following integers:

-2, 5, 2, 0, 3 and -1

7. Mark the opposite of the following numbers on a number line:

-5, 3, -2 and 1

8. Write the opposite of the following numbers (not to draw a number line):

(a) -6 (b) 8 (c) -96 (d) -34

9. Write the additive inverse of the following numbers:

(a) 23 (b) -16 (c) 100 (d) -89

10. Arrange the following integers in ascending order:

(a) 9, -6, 4, 0, -4 (b) -23, -16, 29, 12, 22

11. Arrange the following integers in descending order:

(a) -6, 4, -3, -2, 5 (b) 12, -4, 11, -9, 3

12. Write the successor of following integers:

(a) 23 (b) 98 (c) -6 (d) -21

13. Write the predecessor of following integers:

(a) 4 (b) -12 (c) -82 (d) 23

14. Write the value of following

$|-5|$, $|20|$, $|-11|$, $|20 - 6|$, $|-32|$

15. Write the absolute value of following:

(a) 14 (b) -34 (c) -100 (d) $12 - 8$

16. Write the mirror image of the following integers:

(a) 12 (b) -34 (c) 89 (d) -99

17. Write the number which lies in the left of the given number on the number line:

(a) 15 (b) -32 (c) 54 (d) -87

18. Write the number which lies in the right of the given number on the number line:

(a) 51 (b) 38 (c) -45 (d) -78

19. Write down the next two numbers in the following pattern of numbers:

(a) 7, 4, 1, -2, _____, _____ (b) -8, -6, -4, -2, _____, _____

20. Write down all the integers larger than -5 and smaller than 4 and are even.

21. Replace each * by < or > to make the following statement true:

(a) $12 * 15$ (b) $-3 * 2$ (c) $12 * -6$ (d) $4 * -3$ (e) $-23 * 15$