**SAINIK SCHOOL GOPALGANJ**

**SUMMER VACATION HOMEWORK**

**SUBJECT-MATHS**

**CLASS: - VIII**

**RATIONAL NUMBERS**

1. Write the additive inverse and of these numbers: ½, ¾.

2. Verify that – (– *x*) is the same as *x* for X = -2/3.

3. Write any 3 rational numbers between –2 and 0.

4. Find four rational number between ¼ and ½.

5. Represent these numbers on the number line 3/2, 0 and -2/3.

6. Let *a*, *b*, *c* be the three rational numbers where a= 2, b= -1 and c = 3

Verify: *a* + (*b* + *c*) = (*a* + *b*) +*c*

7. Identify the rational number which is different from the other three 2/3, 1/3, -4/5 and ½.

8. Write the rational numbers from the rational number which are also the integers.

9. Give one example each to show that the rational numbers are closed under addition, subtraction and multiplication..

10. Are rational numbers closed under division? Give two examples in support of your answer.

11. Which number should be subtracted from 11/14 so that we obtain 4.

12. Arrange the following numbers in descending order: -2/3, -4/5, -7/12 and -5/13

13. Answer the followings

* 1. The rational number that does not have a reciprocal.
  2. The rational numbers that are equal to their reciprocals.
  3. The rational number that is equal to its negative.

14. Three consecutive integers are such that when they are taken in increasing order and multiplied by 2, 3, and 4 respectively, they add up to 74. Find these numbers.

15. What number should be added to 15/16 so that we get the rational number

77 / 48.