INTERNATIONAL INDIAN SCHOOL – TABUK

FORMATIVE ASSESSMENT -1

SUB: MATHEMATICS

CLASS: VIII **WORK SHEET**

CHAPTER – 2 LINEAR *EQUATION IN ONE VARIABLE*

I. Answer the following questions:-

1. Twice a number increased by 3 gives 15. Find the number.
2. The numerator of a fraction is 2 less than the denominator. If 1 is added to its denominator it becomes $\frac{1}{2}$. Find the fraction.
3. The sum of three consecutive multiples of 7 is 63. Find these multiples.
4. Solve $\frac{2x-1}{2} + \frac{3x-1}{3} + \frac{4x-1}{4} = 1\frac{11}{12}$
5. Solve $\frac{3x+10}{5x+10} = \frac{5}{7}$
6. Solve and check your solution

   $2x - 3 = 9(x + 7) - 3$

II. Fill in the blanks

7. Is $x^2 - 4x + 3$ a linear equation? _____
8. The root of the equation $8x = 12 + 5x$ is _____.
9. Solve the equation $\frac{x}{2} + 3 = 4$ _____.
10. The value of x if $ax + b = 0$ is _____.
11. Can we transpose any term of an equation from one side to the other side _____.
12. The value of the variable in an equation which makes LHS and RHS equal is called _____.

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Worksheet

RATIONAL NUMBERS

Class:

Tick (√) the correct answer

1. **Every number that can be written as fraction, in which both the numerator and denominator are integers, is**
   a. integers
   b. rational numbers
   c. fraction
   d. decimals

2. **The sum of a number and its opposite, or additive inverse, is**
   a. 0 b. 1
   c. 2 d. Number itself

3. **Number of rational numbers between any two rational numbers is**
   a. 2 b. 4
   c. 0 d. Infinite

4. **Multiplicative inverse of 0 is**
   a. 0 b. 1
   c. does not exist d. none of these

5. **The product of two numbers is $\frac{-9}{35}$. If one of the numbers is $\frac{-4}{7}$, the other is**
   a. $\frac{9}{20}$ b. $\frac{9}{35}$
   c. $\frac{7}{35}$ d. $\frac{-7}{35}$

6. **Which one of the rational numbers... $\frac{-11}{28}, \frac{-5}{7}, \frac{-29}{42}, \frac{9}{-14}$ is the greatest?**
   a. $\frac{-5}{7}$ b. $\frac{9}{-14}$
   c. $\frac{-29}{42}$ d. $\frac{-11}{28}$

7. **Which of the following rational numbers is in the standard form?**
   a. $\frac{3}{11}$ b. $\frac{9}{-81}$
   c. $\frac{-4}{76}$ d. $\frac{14}{24}$

8. **Which is greater, the sum of $\frac{4}{5}$ and $\frac{-7}{9}$ or the subtraction of $\frac{2}{7}$ and $\frac{-1}{5}$?**
   a. the subtraction of $\frac{-1}{5}$ and $\frac{2}{7}$
   b. the sum of $\frac{4}{5}$ and $\frac{-7}{9}$

9. **Simplify** $\left(\frac{2}{5} \div \frac{3}{8}\right) \div \frac{-3}{5}$
   a. $\frac{16}{5}$ b. $\frac{-16}{5}$
   c. $\frac{16}{9}$ d. $\frac{-16}{3}$

10. **Simplify** $\frac{-9}{5} \times \left(\frac{-10}{3} \times \frac{15}{-4}\right) \div 5$
    a. $\frac{-9}{2}$ b. $\frac{9}{2}$
    c. $\frac{45}{2}$ d. $\frac{-45}{2}$

Fill in the blanks.

11. The product of a rational number and its reciprocal is _____.
12. The reciprocal of a, where $a \neq 0$, is _____.
13. Zero has _____ reciprocal.
14. The numbers _____ and _____ are their own reciprocals.
15. As per the _____ property, the two rational numbers can be multiplied in any order, their product remains the _____.

State whether the following statements are true or false.

16. The reciprocal of a positive rational number is negative.
17. The sum of any two rational numbers is also a rational number.
18. Subtraction of rational number is neither commutative nor associative.
19. In case of division of rational numbers, commutative and associative properties are applicable.
20. Zero is the smallest rational number.