KENDRIYA VIDYALAYA, IIT CAMPUS, CHENNAI – 36

VIII MATHEMATICS

WORK SHEET 1 (LINEAR EQUATIONS IN ONE VARIABLE)

Choose correct option in questions 1 to 5.

1. Solve: $6 = z + 2$

   a. 4 b. 8

   c. -8 d. none of these

2. Solve: $8y = 32$

   a. 3 b. 4

   c. 24 d. 40

3. Solve: $4z + 3 = 6 + 2z$

   a. ½ b. 1

   c. $\frac{3}{2}$ d. 0

4. Solve: $3m = 5m - \frac{8}{5}$

   a. 0.2 b. 0.25

   c. 0.5 d. $\frac{4}{5}$

5. Solve: $\frac{z}{z+15} = \frac{4}{9}$

   a. 12 b. 13

   c. 14 d. none of these

Fill in the blanks:

6. The equations are linear, i.e., the highest power of the variable appearing in the equation is _____.

7. The sum of three consecutive multiples of 11 is 363. Find these multiples.

8. Three consecutive integers add up to 51. What are these integers?

9. Sum of the digits of a two-digit number is 9. When we interchange the digits, it is found that the resulting new number is greater than the original number by 27. What is the two-digit number?

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VIII MATHEMATICS

WORK SHEET 2 (LINEAR EQUATIONS IN ONE VARIABLE)

Choose correct option in questions 1 to 5.

1. Solve: $y + 3 = 10$

   a. 7 b. 13

   c. -7 d. none of these

2. Solve: $7x = 21$

   a. 2 b. 3

   c. 14 d. 28

3. Solve: $5x + 9 = 5 + 3x$

   a. 1 b. -1

   c. -2 d. 0

4. Solve: $2y + \frac{5}{3} = \frac{26}{3} - y$

   a. 2 b. 3

   c. 4 d. $\frac{7}{3}$

5. Solve: $\frac{8x-3}{3x} = 2$

   a. 3/2 b. ½

   c. ¼ d. none of these

Fill in the blanks:

6. A linear equation may have for its ____ any rational number.

7. Bansi has 3 times as many two-rupee coins as he has five-rupee coins. If he has in all a sum of Rs 77, how many coins of each denomination does he have?

8. Two numbers are in the ratio 5:3. If they differ by 18, what are the numbers?

9. A positive number is 5 times another number. If 21 is added to both the numbers, then one of the new numbers becomes twice the other new number. What are the numbers?

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VIII MATHEMATICS

WORK SHEET 3 (LINEAR EQUATIONS IN ONE VARIABLE)

Choose correct option in questions 1 to 5.

1. Solve: $x - 2 = 7$

   a. 9 b. 5

   c. -5 d. none of these

2. Solve: $5a = 30$

   a. 5 b. 6

   c. 25 d. 35

3. Solve: $5t - 3 = 3t - 5$

   a. 1 b. 2

   c. -1 d. 0

4. Solve: $\frac{2x}{3} + 1 = \frac{7x}{15} + 3$

   a. 4 b. 6

   c. 8 d. 10

5. Solve: $\frac{3t-2}{4} - \frac{2t+3}{3} = \frac{2}{3} - t$

   a. 2 b. 3

   c. 4 d. none of these

Fill in the blanks:

6. The value of the expression on one side of the equality sign is ____ to the value of the expression on the other side.

7. The present age of Sahil's mother is three times the present age of Sahil. After 5 years their ages will add to 66 years. Find their present ages.

8. Sum of two numbers is 95. If one exceeds the other by 15, find the numbers.

9. Amina thinks of a number and subtracts $\frac{5}{2}$ from it. She multiplies the result by 8. The result now obtained is 3 times the same number she thought of. What is the number?