INDIAN SCHOOL NIZWA - WORKSHEET

Chapter 2 Linear Equations in one variable

MCQ TEST

Name: **Class :VIII Sec:**

Multiple choice questions

1. Which of the following is a linear expression in one variable?

   A. $a^2 - 3$ B. $x + y + z$ C. 4 D. $1 + x$

2. The coefficient of y in $-x^2 - 2y + 1$ is:

   A. 1 B. -2 C. 2 D. -1

3. The perimeter of a rectangle is 15 cm and its width is $3\frac{3}{4}$ cm. Find its length in cm.

   A. $2\frac{3}{4}$ B. $-3\frac{3}{4}$ C. $3\frac{3}{4}$ D. None of these

4. Sagarika solves a linear equation. Her work is shown below:

$$3a - 2 = \frac{a}{3} - 4$$
$$3(3a - 2) = a - 4 \ldots . Step\ 1$$
$$9a - 6 = a - 4 \ldots . Step\ 2$$
$$9a - a = 6 - 4 \ldots . Step\ 3$$
$$8a = 2 \ldots . Step\ 4$$
$$a = \frac{1}{4}$$

   Is Sagarika 's solution correct? If not, in which step did Sagarika make an error?

   A. Yes, solution is correct. B. No, Step 1 is wrong

   C. No, Step 2 is wrong D. No, Step 3 is wrong

5. The shifting of a number from one side of an equation to the other is called_____.

   A. Transposition B. Commutativity C. Distributive property D. Associativity

6. If $\frac{4}{15} \times x = \frac{16}{55}$, the value of x is

   A. $\frac{1}{15}$ B. $\frac{12}{13}$ C. $\frac{11}{12}$ D. $1\frac{1}{11}$

7. If $\frac{x}{3} + 1 = \frac{7}{15}$, then which of the following is correct?

   A. $\frac{x}{3} = \frac{7}{15} - 1$ B. $\frac{x}{3} = -\frac{7}{15} + 1$ C. $\frac{x}{3} = -\frac{7}{15} - 1$ D. none of these

8. If x is an even number, then the next even number is:

   A. $x + 1$ B. $x + 2$ C. $x + 3$ D. $x + 4$

9. The perimeter of a rectangle is 40 cm. If its width is 10 cm, then find the length.

   A. 10 B. 20 C. 30 D. 40

10. Find the value of x if $2x + 10 = 76$.

A. 33 B. 7.6 C. 66 D. 32

11. Identify the algebraic linear equations from the given expressions.

A. $x^2 + x = 2$ B. $3x + 5 = 11$ C. $5 + 7 = 12$ D. $x + y^2 = 3$

12. If a number is divided by 8 it gives 6 as the value. Find the number.

A. 36 B. 42 C. 48 D. 56

13. Pick the equation from the given one's which have solution as z = 2.

A. $2z - 2 = 3$ B. $3z - 2 = -2$ C. $3z - 3 = 3$ D. $4z + 3 = 3$

14. The difference between two numbers is 30. If the bigger number is x, then the smaller number would be _____.

A. $x - 30$ B. $30 - x$ C. $30 + x$ D. $30 \times x$

15. The multiplicative inverse of $\frac{x}{15}$ is _____.

A. $\frac{-15}{x}$ B. $\frac{15}{x}$ C. $\frac{-x}{15}$ D. 15