ASSIGNMENT- 1 22.10.20

A Match the equation with its solution.

1. $x - 9 = 10$
2. $15x = 3$
3. $2(x + 1) = 0$
4. $\frac{6}{x} = 6$
5. $3x + \frac{1}{4} = 0$

a. $x = 1$
b. $x = 19$
c. $x = -\frac{1}{12}$
d. $x = -1$
e. $x = \frac{1}{5}$

B Fill in the blanks.

1. $\frac{t}{7} - 14 = 2$

$\Rightarrow \frac{t}{7} =$ ____

$\Rightarrow t =$ ____

2. $5(x - 5) = 5$

$\Rightarrow x - 5 =$ ____

$\Rightarrow x =$ ____

3. $p + \frac{3}{8} = \frac{3}{8}$

$\Rightarrow p =$ ____

4. $\frac{m+6}{4} = 1$

$\Rightarrow m + 6 =$ ____

$\Rightarrow m =$ ____

C Write true or false.

1. If in an equation, LHS = RHS for $x = 3$, then $x = 3$ is the solution to that equation. ____
2. If the same number is added to both the sides of a given equation, the equality gets changed. ____
3. There exists a unique solution to an equation. ____
4. If in an equation, LHS > RHS for $x = -1$, then $x = -1$ is the solution to that equation. ____
5. There exist an infinite number of equations corresponding to a given solution. ____

D. Tick the correct option.

1. $12x + 12 < 11x + 20$ is
   a. an equation.
   b. a linear equation in one variable.
   c. an inequality.
   d. a linear equation in two variables.

2. $\frac{t}{2} + 2 = 6$ can be expressed as
   a. 2 added to half of a number t gives 6.
   b. half of a number t is 2 less than 6.
   c. the sum of half of a number t and 2 is 6.
   d. all of these

3. Radha's mass is 5 kg more than thrice her brother's mass. If her mass is 65 kg and her brother's mass is x kg, the equation for this statement is
   a. $2x + 5 = 65$. b. $3x + 5 = 65$. c. $3x - 5 = 65$. d. $3y + 5 = 65$.

4. 8 added to a certain number multiplied by 2 gives 24 more than the number. The number is
   a. 15. b. 16. c. 6. d. 17.

E Form an equation and solve.

1. Think of a number. Add 7 to it. Divide the sum by 7 and then multiply the quotient by 3. The answer is 9. Find the number.

2. Divide 100 into two parts such that the greater part is thrice the smaller part.

3. 12 added to four times a number equals twice 6 subtracted from the number. Find the number.

4. The sum of three consecutive multiples of 5 is 60. Find the numbers.