**SELF ASSIGNMENT**

**Class: 9th chapter – 6 Max. Marks: 25**

**Answer the following. Each question carries ½ mark. 10 × ½ = 5M**

1. Where does the graph of linear equation ax + by + c = 0 intersect the Y-axis?
2. Write the coordinates of origin?
3. What is the equation of the line parallel to Y-axis and passing through the point (-2, 3)?
4. Which of the following statement(s) is(are) true?

Statement A: The value of variable is called solution of the equation.

Statement B: A linear equation have infinitely many solutions.

1. What can you say about the graph of the equation y = 5x?
2. Jai said, “Equation of X-axis is x = 0”. Is he correct?
3. Write the general from of a point on Y- axis?
4. If ‘x’ and ‘y’ are natural numbers, then the number of solutions of the equation 2x + y = 7 is \_\_\_\_\_\_\_\_\_.
5. Which of the following is not solution of the equation 3x – y = 7?
   1. (1, -4). B) (-1, 4). C) (0, -7). D) (7/3, 0)
6. Match the following.
   * 1. (3, -5) ( ) P) Q1
     2. (2, 6) ( ) Q) Q2
     3. (-3, 1) ( ) R) Q3
     4. (-5, -2) ( ) S) Q4
   1. P, Q, R, S B) S, P, Q, R. C) S, Q, P, R. D) R, P, Q, S

**Answer all questions. Each one carries 1 mark. 4 × 1 = 4M**

1. Bunny said, “(x + 2)2 = x2 + 4x + 5 is not a linear equation because of degree 2”. Can you agree with him? Justify.
2. Express 'y' in terms of ‘x’, given that +2𝑦=3?
3. “There are infinitely many equations having same solution (-3, 5)”. How?

Explain.

1. Write the following statement as a linear equation in two variables? “In the first one day match, Australia scored 184 less run than twice of the run scored by India”.

**Answer all questions. Each one carries two marks. 4 × 2 = 8M**

1. If (2, a) is a solution of the equation 3x + y = 7 then find ‘a’ value and find two solution of the equation ax + 2y = 3?
2. Check whether the following are solutions or not of the equation.

3x – 2y = 7?

* 1. (-3, -8). B) (-8, -3). C) (0, 0). D) (2, -1/2)

1. If x = 2 – k and y = 2 + k is a solution of the equation 4x – 3y – 3 = 0, find the value of ‘k’?
2. A fraction (x ≠ 0 and y ≠ 0) becomes if 2 is subtracted from the numerator and 4 is added to denominator. Write a linear equation to this information and find two fractions which satisfies the given information?

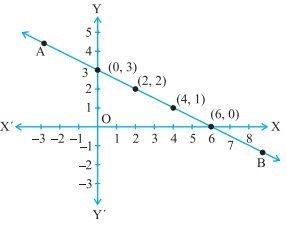
**Answer all questions. Each question carries 4 marks. 2 × 4 = 8 M**

1. Draw the graph of the equation 2x + 3y = 6 and find the following from the graph
   * 1. The value of y when x = 6
     2. The value of x when y = 3

Or

Draw the graph of the equation x + 2y = 7 and find the coordinates of the points where the line cuts the axes.

1. Study the following graph and answer the following questions.



* 1. Which of the following represent the above graph?
     1. 6x + y = 6
     2. X + 2y = 6
     3. 2x + y = 6
     4. X + y = 6
  2. What is the value of ‘x’ when y = -2?
  3. Express the equation in from of y = mx + c?
  4. Is (2, 3) solution of the equation?

Or

“The age of Jeeva is 5 years more than half of the age of krish”. Write a linear equation in two variables and draw the graph to represent the same?