

Linear Equations in Two Variables – Class 10 Notes

1. Introduction

- A linear equation in two variables is an equation that involves two variables and has degree 1.
- General form: $ax + by + c = 0$, where a, b, c are real numbers and a and b are not both zero.

2. Examples

- $2x + 3y = 6$
- $x - y = 4$
- $4x + 2y - 8 = 0$

3. Solution of Linear Equation

- A solution of a linear equation is any pair (x, y) that satisfies the equation.
- There are infinitely many solutions for a linear equation in two variables.

4. Graph of Linear Equation

- The graph of a linear equation in two variables is always a straight line.
- To draw the graph, find at least two solutions and plot them on the coordinate plane.

5. Steps to Draw Graph

- Choose values for x and find corresponding y .
- Plot the points on the coordinate plane.
- Join the points to get a straight line.

6. Important Points

- Every linear equation represents a straight line.
- Any point on the line satisfies the equation.

7. Example Problem

- Find two solutions of equation $2x + y = 4$.
- If $x = 1, y = 2$
- If $x = 2, y = 0$