CHAPTER 4
LINEAR EQUATIONS IN TWO VARIABLES

NOTES

1. A linear polynomial in two variables equated to zero gives a linear equation in two variables.
2. The general form of a linear equation in two variables is $ax + by + c = 0$, where a, b, c are constants and a, b are both non-zero.
3. Solution of a Linear Equation in Two Variables

   For a linear equation in two variables (say x and y), a pair of values, one for x and one for y which satisfy the equation is called a solution of the equation.

   Note: 1. A linear equation in one variable has a unique solution.

   2. A linear equation in two variables has infinitely many solutions.

4. The graph of every linear equation in two variables is a straight line.
5. The graph of $x = c$ is a straight line parallel to Y-axis, passing through $(c, 0)$.
6. The graph of $y = c$ is a straight line parallel to X-axis, passing through $(0, c)$.
7. The graph of $x = 0$ is the Y-axis.
8. The graph of $y = 0$ is the X-axis.
9. The graph of an equation of the type $y = kx$, where k is a constant, always passes through the origin.

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