3. ALGEBRA

Learning Outcomes:

- To solve system of linear equations in three variables by the method of elimination
- To find GCD and LCM of polynomials
- To simplify algebraic rational expressions
- To understand and compute the square root of polynomials
- To learn about quadratic equations
- To draw quadratic graphs
- To learn about matrix, its types and operations on matrices

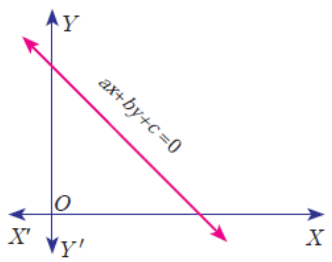
Representation of Linear Equations:

Linear Equation in two variables

Any first degree equation containing two variables x and y is called a linear equation in two variables. The general form of linear equation in two variables x and y is $ax+by+c = 0$, where atleast one of a, b is non-zero and a, b, c are real numbers.

Note that linear equations are first degree equations in the given variables.

- A linear equation in two variables of the form $ax + by + c = 0$, represents a straight line.



- A linear equation in three variables of the form $ax + by + cz + d = 0$, represents a plane.