Graphical Solution

System of equations can be solved using Algebraic and Graphical methods.

The **general form** of a pair of linear equations in two variables is

$$a_1x + b_1y + c_1 = 0$$
$$a_2x + b_2y + c_2 = 0$$

where $a_1, a_2, b_1, b_2, c_1, c_2$ are real numbers, such that $a_1^2 + b_1^2 \neq 0, a_2^2 + b_2^2 \neq 0$

Drawing a Graph

1. Write the given equation with y or x as the subject.
2. Consider any three suitable values of x and find the corresponding values of y for each of the assumed value of x.
3. Make a table for the different ordered pairs (points) of values x and y.
4. Draw the axes on the graph paper and choose suitable scale.
5. Plot these points on the graph paper.
6. Draw a straight line passing through the points plotted on the graph.

Solution of Simultaneous Linear Equations Graphically

1. Draw a graph (straight line) on the same graph paper for each given equation.
2. Find the coordinates of the point of intersection of the two lines drawn.
3. The coordinates of the point of intersection give the solution of the given equations.