

Chapter 04

LINEAR EQUATIONS IN TWO VARIABLES

SUMMARY:

In this chapter, you have studied the following points:

- ◆ An equation of the form $ax + by + c = 0$, where a , b and c are real numbers, such that a and b are not both zero, is called a linear equation in two variables.
- ◆ A linear equation in two variables has infinitely many solutions.
- ◆ The graph of every linear equation in two variables is a straight line.
- ◆ $x = 0$ is the equation of the y -axis and $y = 0$ is the equation of the x -axis.
- ◆ The graph of $x = a$ is a straight line parallel to the y -axis.
- ◆ The graph of $y = a$ is a straight line parallel to the x -axis.
- ◆ An equation of the type $y = mx$ represents a line passing through the origin.
- ◆ Every point on the graph of a linear equation in two variables is a solution of the linear equation.
Moreover, every solution of the linear equation is a point on the graph of the linear equation.