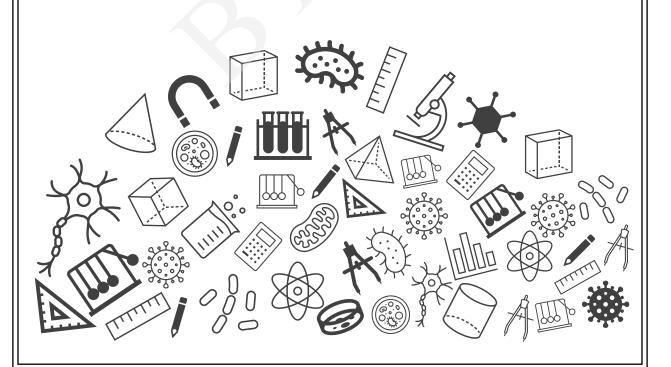


Grade 09 Mathematics Chapter Notes

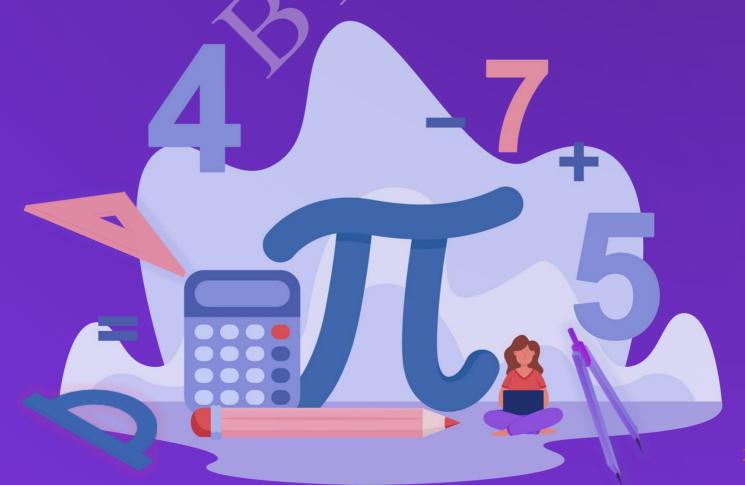


B BYJU'S Classes

CHAPTER NOTES

Linear Equations in Two Variables

Grade 09





Topics to be Covered

1. Linear Equations in Two Variables

2. Solution of a Linear Equation



1. Linear Equations in Two Variables

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.

Example:

$$x - y = 2$$

Rearranging the equation in the form

$$ax + by + c = 0$$
;

$$1.x - 1.y - 2 = 0$$
 where,

$$a = 1, b = -1, \text{ and } c = -2.$$

2. Solution of a Linear Equation

$$4x + 3y = 12$$

The solution to the above equation can be determined by following the below steps:

Step 1: Substitute
$$x = 0$$
; we get

$$3y = 12$$

$$y = 4$$

So (0, 4) is the solution of the given equation.

Step 2: Substitute y = 0; we get

$$4x = 12$$

$$x = 3$$

So (3, 0) is the solution of the given equation.

Similarly, we can find multiple solutions for the given equation by substituting any value for one variable and finding the value for other variable.



A linear equation in two variables has infinitely many solutions.



Mind Map

