

Linear Equations in two variables

Section A 1 mark each

- Q1. Define a linear equation in two variables.
- Q2. What do you mean by solution of linear equation in two variables?
- Q3. Is $2x + 3y + z = 0$ this a linear equations in two variables?
- Q4. Check if $x = 2, y = 3$ is a solution of $3x + 2y = 12$
- Q5. Write $x = -3$ as a linear equation in two variables.

Section B 2 marks each

- Q6. Find a if $(1, 2)$ is a solution of $2x + ay = 15$
- Q7. Write equation of a line passing through $(3, -5)$. How many such lines are possible?

Section C 3 marks each

- Q8. Draw the graph of $x + y = -7$. Shade the triangle formed between the x axis, y axis and the given line.
- Q9. Write the equation of a line parallel to x-axis and draw its graph.
- Q10. Draw the graph of $2x - 3y = -6$. From the graph find the coordinates of the points where the line meets x axis and y axis.

Section D 6 marks each

- Q11. The taxi fare in a city is as follows: For the first 5 km the fare is Rs 10 per Km and after that Rs 8 per Km. Taking distance covered as $x + 2$ km and total fare as Rs. $y - 6$, write a linear equation, solve it and draw its graph.
- Q12. Solve the equation $3x + 1 = x + 1$ and represent the solution on
(1) number line (2) the Cartesian plane