Class 10

PAIR OF LINEAR EQUATIONS IN TWO VARIABLES

$ax + by + c = 0$

$a_1x + b_1y + c_1 = 0$

10 MCQs

1 Which of the following is not a linear equation?

- A $5 + 4x = y + 3$
- B $x + 2y = y - x$
- C $3 - x = y^2 + 4$
- D $x + y = 0$

2 The pair of equations $2x - y = 4$ and $4x - 2y = 6$ are:

- A Consistent equations
- B Dependent equations
- C Inconsistent equations
- D Coincident equations

3 The solution of the equations $\sqrt{3}x + \sqrt{5}y = 0$ and $\sqrt{7}x + \sqrt{11}y = 0$ is:

- A $x = 3, y = 5$
- B $x = 7, y = 11$
- C $x = 1, y = 1$
- D $x = 0, y = 0$

4 The value of x satisfying $3x - (x - 4) = 3x + 1$ is:

- A -3
- B 0
- C 3
- D 10

5 Which of the following equations is inconsistent with $2x + 3y - 5 = 0$?

- A $4x - 6y - 11 = 0$
- B $2x + y = 5$
- C $x + 3y = 5$
- D $4x + 6y - 11 = 0$

6 The value of x satisfying $2(x - 1) - (1 - x) = 2x + 3$ is:

- A 2
- B 4
- C 6
- D 8

7 The value of k for which the system $kx - y = 2$ and $6x - 2y = 3$ has no solution is:

- A 3
- B $\neq 3$
- C $\neq 0$
- D 0

8 If $2x + 3y = 8$ and $4x + py = 16$ have infinitely many solutions, then p is:

- A 8
- B 6
- C 10
- D 16

9 A pair of linear equations has a unique solution when:

- A $\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}$
- B $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$
- C $\frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$
- D $\frac{a_1}{a_2} = \frac{b_1}{b_2}$

10 A pair of linear equations is inconsistent if:

- A The lines intersect at one point
- B The lines coincide
- C The lines are parallel
- D The lines are perpendicular

Ramaswamy Kodam

LIVEWORKSHEETS