

# MATHS4U

## Assignment

+9 Class

It's all about believing

Topic:- Linear equation in two variable

### One mark Questions

1. The equation of x-axis is (a)  $x = k$  (b)  $y = 0$  (c)  $x = 0$  (d)  $y = k$
2. The equation of y-axis is (a)  $y = k$  (b)  $x = k$  (c)  $x = 0$  (d)  $y = 0$
3. The equation of a line parallel to y-axis is (a)  $x = 1$  (b)  $x = 0$  (c)  $y = 3$  (d)  $y = k$
4. The line  $y + 2 = 0$  is (a) parallel to y-axis (b) passing through the origin (c) parallel to x-axis (d) none of these
5. The linear equation  $3x - 2y = 5$  has (a) a unique solution (b) two solutions (c) no solution (d) infinitely many solutions
6. The graph of the equation  $3x - 4y = 8$  cuts the y-axis at the point (a) (2, 0) (b) (0, 2) (c) (3, 0) (d) (0, -2)
7. The equation  $x = 5$  in two variables can be written as (a)  $1.x + 1.y = 5$  (b)  $1.x + 0.y = 5$  (c)  $0.x + 1.y = 5$  (d)  $0.x + 0.y = 5$
8. Any point on the x-axis is of the form (a) (x, y) (b) (0, y) (c) (x, 0) (d) (x, x)
9. The graph of  $y=3$  is a line (a) parallel to x-axis at a distance of 3 units from the (b) parallel to y-axis at a distance of 3 units from the origin (c) making an intercept 6 on the x-axis (d) making an intercept 6 on both the axes
10.  $X = 3, y = -2$  is a solution of the equation (a)  $3x - 2y = 11$  (b)  $x + y = 5$  (c)  $4x - 3y = 18$  (d)  $3x + y = 5$

### Two mark Questions

Write four solutions for each of the following equations

11.  $2x - 3y = 0$

12.  $3x + y = 7$

13.  $\pi x + y = 5$

14.  $5x - 2 = 0$

15.  $3x - 4y = 12$

### Three mark Questions

16.  $x - y + 1 = 0$

17.  $x - 2y = 0$

18.  $2x - 3y + 12 = 0$

19.  $X + 2y - 5 = 0$

20.  $2x + 5y = 0$

21.  $x = y$

22.  $3x + 4y - 7 = 0$

23.  $5x - 2y + 12 = 0$

24 Express y in terms of x from the equation  $5y - 3x - 10 = 0$  Find the point where the line represented by the equation  $5y - 3x = 10$  cuts the y-axis.

25. Express x in terms of y from the equation  $3x + 2y = 12$  Find the point where the line represented by the equation  $3x + 2y - 12 = 0$  cuts the x-axis.

Answer

1.B 2.C 3.A 4.C 5.D 6.D 7.B 8.C 9.A 10.C 11.(0, 0), (3, 2), (-3, -2),  $\left(\frac{3}{2}, 1\right)$  12.  $\left(\frac{7}{3}, 1\right)$ , (2, 1), (3, -2),

(0, 7) 13.  $\left(\frac{5}{\pi}, 0\right)$ , (0, 5),  $\left(\frac{4}{\pi}, 1\right)$ ,  $\left(\frac{3}{\pi}, 2\right)$  14.  $\left(\frac{2}{5}, 0\right)$ ,  $\left(\frac{2}{5}, 1\right)$ ,  $\left(\frac{2}{5}, 2\right)$ ,  $\left(\frac{2}{5}, 3\right)$  15.(4, 0), (0, -3),  $\left(2, -\frac{3}{2}\right)$ , (8, 3)

24.  $y = \frac{3}{5}x + 2$ ; (0, 2) 25.  $X = -\frac{2}{3}y + 4$ ; (4, 0)