

**Class: 9**

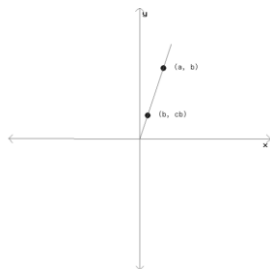
**Subject: Mathematics**

**Topic: Linear equation in Two Variables**

**No. of Questions: 20**

- Q1. In the graph of the linear equation  $2x+2y = 8$ , there is a point such that its ordinate is thrice of abscissa. Find coordinates of the point.
- Q2. In the graph of the linear equation  $2x+2y = 26$ , there is a point such that its ordinate is 3 less than its abscissa. Find coordinates of that point.
- Q3. The positive solutions of the equation  $px+qy=r$  always lie in which quadrant?
- Q4. At what point does line represented by the equation  $7x+3y = -11$  intersects a line which is parallel to the y-axis, and a distance 2 units from the origin and in the negative direction of x-axis.
- Q5. A point on line  $x = 0$  is of the form
- (a)  $(0, a)$
  - (b)  $(a, -a)$
  - (c)  $(a, a)$
  - (d)  $(a, 0)$
- Q6. A point of the form  $(p, p)$  lies on the line
- (a)  $Y = 0$
  - (b)  $X = Y$
  - (c)  $X = 0$
  - (d)  $X + y = 0$
- Q7. If point  $(3, 2)$  lies on the graph of linear equation  $bx+5y = 19$ , find the value of b.
- (a) 1
  - (b) 5
  - (c) 3
  - (d) 4

- Q8. A line passes through points  $(-3, 11)$  and  $(2, -4)$ . Find the y-intercept of the line
- (a) 0
  - (b) 4
  - (c) 2
  - (d) 3
- Q9. A line passes through points  $(-2, 5)$  and  $(-1, 3)$ . Find the x-intercept of the line.
- (a) 0
  - (b) 1.5
  - (c) 0.5
  - (d) -0.5
- Q10. The graph of equation for the line  $x = b$  is a line
- (a) Parallel to x-axis at a distance  $b$  units from the origin
  - (b) Making an intercept  $b$  on both the axes
  - (c) Making an intercept  $b$  on the y-axis
  - (d) Parallel to y-axis at a distance  $b$  units from the origin
- Q11. If both sides of an equation are multiplied by a non-zero number, then solution of the equation.
- (a) Changes
  - (b) May or may not change depending on the equation
  - (c) Remains the same
  - (d) Will also be multiplied by same number
- Q12. Find the linear equation represented in the graph below.



- (a) -1
- (b)  $a/b$
- (c)  $b/a$
- (d)  $ab$

- Q13. Find the point where linear equation  $2x+4y = 4$  intersects with Y-axis.
- (a) (1, 0)
  - (b) (0, 4)
  - (c) (0, 1)
  - (d) (2, 0)
- Q14. The equation of x-axis is
- (a)  $X+Y = 0$
  - (b)  $Y = 0$
  - (c)  $X = 0$
  - (d)  $X = y$
- Q15. Equation  $3x+5y = 10$  has infinitely many solutions.
- (a) True
  - (b) False
- Q16. Draw the graph of the equation  $y = 2x$ . From your graph, find the value of x when  $y = -2$ .
- Q17. Find four different solutions of the equation  $x+2y = 6$ .
- Q18. Yamini and Fatima, two students of Class IX of a school, together contributed Rs.100 towards the prime Minister's Relief Fund to help the earthquake victims. Write a linear equation which satisfies this data. (You may take their contributions as Rs. x and Rs. y.) Draw the graph of the same.
- Q19. The value of x for which  $y = -4$  is a solution of the linear equation  $5x-8y = 47$  is
- (a) -3
  - (b) 3
  - (c)  $\frac{79}{5}$
  - (d)  $-\frac{79}{5}$
- Q20. A solution of the equation  $2x+0.y +9 = 0$  in two variables is of the form
- (a)  $\left(-\frac{9}{2}, m\right)$
  - (b)  $\left(m, -\frac{9}{2}\right)$
  - (c)  $\left(0, -\frac{9}{2}\right)$
  - (d)  $(-9, 0)$

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