

SUB- MATHEMATICS, CLASS-IX
CHAPTER -LINEAR EQUATION IN TWO VARIABLES
WORKSHEET(STANDARD)

TIME-45MINS

MAXIMUM MARKS-20

CHOOSE THE CORRECT OPTION.(MCQ (2× 1 = 2))

1. The equation $2x + 5y = 7$ has a unique solution, if x, y are :
(A) Natural numbers (B) Positive real numbers
(C) Real numbers (D) Rational numbers

- 2.If a linear equation has solutions $(-2, 2), (0, 0)$ and $(2, -2)$, then it is of the form
(A) $y - x = 0$ (B) $x + y = 0$
(C) $-2x + y = 0$ (D) $-x + 2y = 0$

FILL IN THE BLANKS (2× 1 = 2)

3. The value of k , if $x = 4, y = -1$ is a solution of the equation $x + y - k = 0$ is -----

4. The equation of x -axis is of the form ----- .

ANSWER THE FOLLOWING. (2× 1 = 2)

- 5.Find the points (without drawing the graph) where the graph of the equation $3x + 4y = 12$ cuts the x -axis and the y -axis.

6. The line parallel to the y -axis at a distance 4 units to the left of y -axis is given by the equation $x = -4$. State whether the above statement is true or false with reason.

SHORT ANSWER TYPE QUESTIONS-I : (2× 2 = 4)

7. Write the linear equation such that each point on its graph has an ordinate 3 times its abscissa and write the quadrants on which the graph of the above equation passes through.

8. For what value of c , the linear equation $2x + cy = 8$ has equal values of x and y for its solution.

SHORT ANSWER TYPE QUESTIONS-II : (2× 3 = 6)

9. Let y varies directly as x . If $y = 12$ when $x = 4$, then write a linear equation. What is the value of y when $x = 5$?

10. Draw the graphs of linear equations $y = x$ and $y = -x$ on the same cartesian plane and find the points where the graphs intersects the coordinate axes.

LONG ANSWER TYPE QUESTIONS : (1× 4 = 4)

- 11.The Autorikshaw fare in a city is charged Rs 10 for the first kilometer and @ Rs 4 per kilometer for subsequent distance covered. Write the linear equation to express the above statement. Draw the graph of the linear equation.