

BHARATIYA VIDYA BHAVAN'S V. M. PUBLIC SCHOOL, VADODARA

CLASS – IX

SUBJECT – MATHEMATICS

CHAPTER – LINEAR EQUATION IN TWO VARIABLES

1. Express the following linear equations in the form $ax + by + c = 0$ and indicate the values of a , b and c in each case.

(a) $2x + 3y = 9.35$ (b) $x - y - 10 = 5$ (c) $y - 2 = 0$ (d) $2x = -5y$ (e) $3x + 2 = 0$

2. Express y in terms of x , given that $2x - 5y = 7$. Check whether the point $(-3, -2)$ is on the given line.

3. Find the value of ' k ', if the line represented by the equation $2x - ky = 9$ passes through the point $(-1, -1)$.

4. Find the point of intersection of the line represented by the equation $7x + y = -2$ with x axis. Check whether the point $(2, 1)$ is a solution of the equation.

5. Express y in terms of x in the following equations:

(i) $7x - 3y = 10$ (ii) $2x - \frac{3y}{4} = 5$ (iii) $\frac{2x-7}{5} = \frac{y-3}{6}$ (iv) $\frac{-4x}{9} - 5y = \frac{1}{2}$

6. Draw the graph of $y = x$ and $y = -x$ in the same graph. Also find the coordinates of the point where the two lines intersect.

7. Draw the graph of the following lines:

(i) $5x + y = 7$ (ii) $3x + 4y = 6$ (iii) $7y - 10 = 4$ (iv) $3x + 1 = -8$

Also find the coordinates of the point at which the lines intersect the axes.

8. Write the equation of two lines passing through the following points:

(i) $(-2, 5)$ (ii) $(10, -10)$ (iii) $(-6, 7)$

9. Draw the graphs of the lines represented by the equations $3x + y = 5$ and $4x - y = 2$ in the same graph. Also find the coordinates of the point at which the lines intersect.

10. Solution of the equation $3x + ky = 6$ is given below: Fill in the blanks:

x	2	0	-2	_____	_____
y	_____	3	_____	-1	-3