CO-ORDINATES AND SOLUTION OF SIMULTANEOUS LINEAR

1. Graph the equation 2x – y = 6.
2. Draw the graph of the equation y= 5x.
3. Draw the graph of the line given by 4x + 5y = 20.
4. Draw the graph of the line given by 5y = 2x -3.
5. Graph the equation (i) y= 4, (ii) x= - 5.
6. Solve graphically the system 2x – y = 5, x + 3y = 6.
7. Solve

a. Use a graph paper for this question. Draw a graph of 3x – y -2 = 2 and 2x + y – 8 = 0. Take 1 cm = 1 unit on both axes and plot only three points per line.

b. Write down the coordinates of the point of intersection and the area of the triangle formed by the lines and the x-axis.

8. Find the distance between points (6, - 8), (2, -5).
9. Find the coordinates of points on the y-axis which are at a distance of 5 units from the point (3, 2).
10. If the points (2, 1) and (1, -2) are equidistant from the point (x,y) show that x+ 3y = 0.
11. Show that the points (6,9), (0, 1) and (-6, -7) are collinear.
12. Prove that the points (2, -2), (-2, 1) and (5, 2) are the vertices of a right- angled . Find the area of the triangle and the length of its hypotenuse.
13. Show that the points (a, a), (-a, -a) and ($-\sqrt{3a}$,+ $\sqrt{3a}$) are the vertices of an equilateral triangle. Also, find its area.
14. If P (-3, 2), Q (-5, -5), R (2, -3) and S (4,4) be four points in a plane show that PQRS is a rhombus.
15. Is it a square? Also find the area of the rhombus.
16. The point A(5, -1) on reflection in x- axis is mapped as A'. Also A on reflection in y- axis is mapped as A". Write the coordinates of A' and A" and calculate the distance A'A".