

National Institute of Open Schooling (NIOS)

Secondary Course

Lesson –19: Coordinate Geometry

Worksheet – 19

1. Write the x and y coordinates of the following points and show it on the graph paper
(a) (3, -2) (b) (-6, -3) (c) (-7, 3)
2. Identify the following points on quadrant-wise
(a) (-6, -2) (b) (-5, 3) (c) (4, 3)
3. Find the distance between each of the following points
(i) P (8, -2) and Q (11, 2)
(ii) A (5, -3) and B (11, 5)
4. Determine the ratio in which the line $3x + y - 9 = 0$, internally divides the segment joining the points (1, 3) and (2, 7)
5. Plot (-3, 0), (5, 0) and (0, 4) on Cartesian plane. Name the figure formed by joining these points and find its area.
6. In an equilateral triangle ABC with coordinates as B (-3, 0) and C (3, 0). Find the coordinates of the vertex A.
7. Prove that the points (2, -2), (-2, 1) and (5, 2) are vertices of a right angled triangle.
8. The distance between two points (0, 0) and (y, 4) is 5. Find the value of y.
9. The three points A (-5, 6), B (-1, 2) and C (2, -1) on the Cartesian plane. Find the distance between AB, BC, and CA and also show that three points are collinear.
10. The coordinates of the vertices of a triangle are (4, -2), (10, 7) and (5, 3). Find the coordinate of Centroid of the triangle.