

**SHRI DHARMASTHALA MANJUNATHESHWARA SCHOOL,
GRADE 9 WORKSHEET 3: COORDINATE GEOMETRY**

1. If ABCD is a square, whose co-ordinates are $A(3, 4)$, $B(-2, 4)$, $C(-2, -1)$. Find the coordinate of D by plotting the points on graph paper.
2. Plot the points $(0, -4)$, $(-4, 0)$, $(0, 0)$ on the graph. What type of figure you are getting, find the area of it.
3. Plot the points $A(-4, 4)$, $B(-6, 0)$, $C(-4, -4)$, $D(-2, 0)$. Write what type of figure you get and find the area of it.
4. By plotting the points $(3, 5)$, $(1, -1)$, $(0, 1)$, check whether they are collinear or not.
5. Find the area of the triangle formed by joining the points $(0, 5)$, $(5, 0)$, $(0, 0)$.
6. Plot the points $A(5, 3)$, $B(-2, 3)$, $D(5, -4)$ which are three vertices of a square ABCD. Hence find the co-ordinates of C. Also find the area of it.
7. Draw an equilateral triangle ABC in which the co-ordinates of the vertices B and C are $(3, 0)$ and $(-3, 0)$ respectively. Find the co-ordinates of the vertex A.
8. Write the coordinates of the vertices of a rectangle whose length and breadth are 5 and 3 units respectively. One vertex at the origin, the longer side lies on the X-axis and one of the vertices lies in the third quadrant.
9. Find the coordinates of the point:
 - i) which lies on both x and y-axis.
 - ii) whose abscissa is 5 and lies on x-axis.
 - iii) whose ordinate is -4 and lies on y-axis.
10. Draw the quadrilateral with vertices $(-4, 4)$, $(-6, 0)$, $(-4, -4)$, $(-2, 0)$. Name the type of quadrilateral and find its area.