

SECTION A 1 Mark each

- Q1. Find the distance between A $(-a, b)$ and B $(a, -b)$
- Q2. The coordinates of midpoints of a line segment CD are $(5, 6)$. If coordinates of C are $(3, 4)$. Find coordinates of D.
- Q3. Check whether the points A $(3, 1)$, B $(6, 4)$ and C $(8, 6)$ are collinear.
- Q4. Find the area of triangle formed by the points $(0, 2)$, $(3, 4)$ and $(5, 6)$
- Q5. Find the coordinates of a point A which divides the join of P $(2, 3)$ and Q $(5, 7)$ in ratio 2:3

SECTION A 2 Mark each

- Q6. Two opposite vertices of a square ABCD are A $(0, 0)$ and C $(8, 9)$. Find the other two vertices.
- Q7. Find b for points $(b, 1)$, $(1, -1)$ and $(11, 4)$ to be collinear
- Q8. Do the following points form a quadrilateral? A $(-3, 5)$, B $(3, 1)$, C $(0, 3)$, D $(-1, -4)$

SECTION A 3 Mark each

- Q9. The line segment joining the points $(3, -4)$ and $(1, 2)$ is trisected at points M and N. If the coordinates of M and N are $(m, -2)$ and $(\frac{5}{3}, n)$ respectively, find the values of m and n.
- Q10. Using coordinate geometry prove midpoint of hypotenuse is equidistant from the three vertices
- Q11. For triangle ABO, A $(7, 0)$ B $(0, -24)$ and O $(0, 0)$ Prove median divides a triangle into 2 triangles equal in area.