

1. Draw a quadrilateral in the Cartesian plane, whose vertices are $(-4, 5)$, $(0, 7)$, $(5, -5)$ and $(-4, -2)$. Also, find its area.
2. The base of an equilateral triangle with side $2a$ lies along the y -axis such that the mid-point of the base is at the origin. Find vertices of the triangle.
3. Find the distance between $P(x_1, y_1)$ and $Q(x_2, y_2)$ when : (i) PQ is parallel to the y -axis, (ii) PQ is parallel to the x -axis.
4. Find a point on the x -axis, which is equidistant from the points $(7, 6)$ and $(3, 4)$.
5. Find the slope of a line, which passes through the origin, and the mid-point of the line segment joining the points $P(0, -4)$ and $B(8, 0)$.