Chapter-Coordinate Geometry
Question bank

Q1.

If the point P(x, y) is equidistant from the points A (a + b, b – a) and B(a -b,a+ b). Prove that bx = ay.

Q2.

If the coordinates of points A and B are (-2, -2) and (2, – 4) respectively, find the coordinates of P such that AP = 3/7 AB, where P lies on the line segment AB.

Q3.

Point A lies on the line segment PQ joining P(6, -6) and Q(-4, -1) in such a way that PA/PQ=2/5. If point P also lies on the line 3x + k(y + 1) = 0, find the value of k

Q4.

Points A(-l, y) and B(5,7) lie on a circle with centre 0(2, -3y). Find the values ofy. Hence, find the radius of the circle.

Q5.

. **Find the ratio in which $P(4, m)$ divides the line segment joining the points $A(2, 3)$ and $B(6, -3)$. Hence find m. [CBSE, 2018]**

Q6. Find a point on the y-axis which is equidistant from the points A(-5, 2) and B(9, -2).

Q7. Find the coordinates of the points of trisection of the line segment joining (4, -1) and (-2, -3).

Q8. If A (-2, 4), B (0, 0) and C (4, 2) are the vertices of triangle ABC, then find the length of the median through the vertex A.

Q9. Show that the points (-3, 2), (-5, -5), (2, -3), and (4, 4) are the vertices of a rhombus. Find the area of this rhombus.

Q10.

Find a relation between x and y such that the point (x , y) is equidistant from the points (7, 1) and (3, 5).