PRACTICE QUESTIONS (COORDINATE GEOMETRY)
CLASS: X : MATHEMATICS

1. Find the perimeter of a triangle with vertices (0,4), (0,0), and (3,0).

2. If the distance between the points (4,p) and (1,0) is 5, then find the value of p.

3. If the distance between the points (x, –1) and (3, 2) is 5, then find the value of x.

4. Find the value of y is 3, if the distance between the points P(2, -3) and Q(10, y) is 10

5. Check whether the points A (1,2), B (4,1) and C (-2,3) are collinear or not.

6. Find the ratio in which the line segment joining the points A (5, 3) and B (-3, 11) is divided by the point C (3,5).

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

8. If the mid-point of the line segment joining the points P(6, b – 2) and Q(– 2, 4) is (2, – 3), find the value of b.

9. If A(1, 2), B(4, 3) and C(6, 6) are the three vertices of a parallelogram ABCD, find the coordinates of the fourth vertex D.

10. Find the coordinates of the point which divides the line segment joining the points (4, – 3) and (8, 5) in the ratio 3 : 1 internally.

11. If P(2, p) is the mid-point of the line segment joining the points A(6, –5) and B(–2, 11), find the value of p.

12. Find the value of k if P(4, –2) is the mid-point of the line segment joining the points A(5k, 3) and B(–k, –7).

13. Find the point on y-axis which is equidistant from the points (5, – 2) and (–3, 2).

14. What point on the x-axis is equidistant from (7, 6) and (– 3, 4)?

15. If the points A(4, 3) and B(x, 5) are on the circle with the centre O(2, 3), find the value of x.

16. In what ratio does the point (– 4, 6) divide the line segment joining the points A(– 6, 10) and B(3, – 8)?

17. Find the coordinates of the points of trisection of the line segment joining the points A(2, – 2) and B(– 7, 4).

18. Find the ratio in which the y-axis divides the line segment joining the points (5, – 6) and (–1, – 4). Also find the point of intersection.

19. If the points A(6, 1), B(8, 2), C(9, 4) and D(p, 3) are the vertices of a parallelogram, taken in order, find the value of p.

20. Find the ratio in which the line segment joining A(1, – 5) and B(– 4, 5) is divided by the x-axis. Also find the coordinates of the point of division.

21. If (1, 2), (4, y), (x, 6) and (3, 5) are the vertices of a parallelogram taken in order, find x and y.