

Section A (10 Marks)

1. Find the distance between the points A(2, 3) and B(5, 7).
2. Find the coordinates of the midpoint of the line segment joining the points A(3, 5) and B(7, 9).
3. Find the coordinates of the point that divides the line segment joining the points A(1, 2) and B(4, 5) in the ratio 2:1.
4. Find the area of the triangle formed by the points A(2, 3), B(4, 5), and C(6, 7).
5. Find the slope of the line passing through the points A(2, 3) and B(5, 7).

Section B (10 Marks)

6. Find the equation of the line passing through the points A(2, 3) and B(5, 7).
7. Find the equation of the line with slope 3 and y-intercept 2.
8. Find the equation of the line perpendicular to the line $2x + 3y = 5$ and pass through the point (1, 2).
9. Find the equation of the line passing through the point (2, 3) and making an angle of 45° with the positive x-axis.
10. Find the equation of the line passing through the point (3, 4) and parallel to the line $2x - 3y = 5$.