Class 10 Maths – Chapter 7: Coordinate Geometry
© 25 Most Repeated Board & Sample Questions

Section A: Multiple Choice Questions (MCQs)
Q1. What is the distance between points A(3, 4) and B(0, 0)? (CBSE 2020) a) 5 units b) 7 units c) $\sqrt{13}$ units d) $\sqrt{25}$ units
Q2. The coordinates of the midpoint of segment joining A(2, 3) and B(6, 7) are: (CBSE 2021 a) $(3, 5)$ b) $(4, 5)$ c) $(5, 4)$ d) $(3, 4)$
Q3. What is the distance between the points (1, 2) and (4, 6)? (CBSE 2019) a) 5 b) $\sqrt{18}$ c) $\sqrt{25}$ d) 6
Q4. The centroid of triangle with vertices (0, 0), (6, 0), (0, 6) is: (CBSE 2022) a) (2, 2) b) (3, 2) c) (2, 3) d) (1, 1)
Q5. The point which divides the line segment joining A(-1, 2) and B(3, 6) in ratio 1:1 is: (CBSE 2023)
a) (2, 4) b) (1, 3) c) (0, 4) d) (1, 5)

Section B: Short Answer Type Questions
Q6. Find the distance between the points (7, −4) and (3, 2). (CBSE 2022)
Q7. Find the coordinates of a point which divides the line joining $A(1, -2)$ and $B(3, 4)$ in the ratio 2:1. (CBSE 2021)
Q8. Find the coordinates of the midpoint of line joining (-2, 5) and (4, -3). (CBSE 2018)
Q9. Find the coordinates of the centroid of a triangle with vertices A(1, 2), B(4, 6), C(7, 2). (CBSE 2019)
Q10. Prove that A(2, 3), B(4, 7), and C(6, 11) lie on a straight line. (CBSE 2017)
Section C: Long Answer Type Questions
Q11. Prove that A(3, 2), B(-2 , -3), and C(2, 3) form a right triangle. (CBSE 2017)

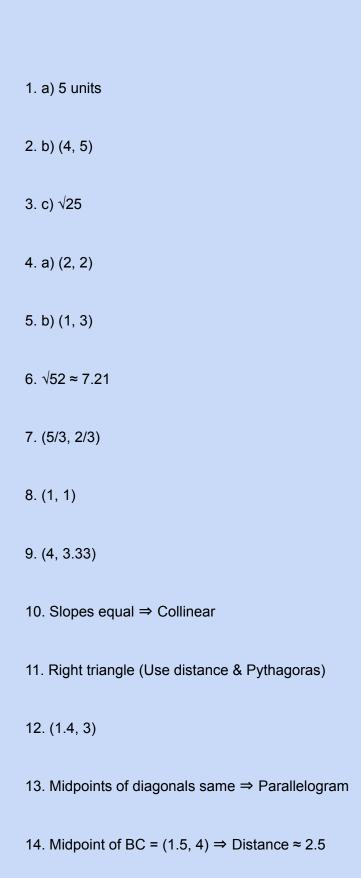
- Q12. Find the coordinates of the point dividing AB where A(-1, 7), B(4, -3) in 3:2 ratio. (CBSE 2020)
- Q13. Show that A(-2, -1), B(4, 0), C(3, 3), and D(-3, 2) are vertices of a parallelogram. (CBSE 2023)
- Q14. Find the length of the median from vertex A of triangle with A(1, 2), B(-1, 3), C(4, 5). (CBSE 2022)
- Q15. Find a point P on the line joining A(2, -1) and B(5, 8) such that AP/PB = 3/4. (CBSE 2020)

- Section D: Competency-Based Questions
- Q16. A car moves from A(2, 3) to B(10, 7). Find the distance covered. (CBSE Sample)
- Q17. A person moves from (0, 0) to a tower at (3, 4). Find the distance. (CBSE 2023)

- Section E: Miscellaneous & Frequent Questions
- Q18. Find the area of triangle with vertices (-2, -3), (3, 2), (4, -1). (CBSE 2021)
- Q19. Show that (1, 5), (2, 3), (3, 1) lie on a line. (CBSE 2019)
- Q20. If centroid of \triangle ABC is (2, 3), and A(1, 2), B(3, 6), find coordinates of C. (CBSE 2020)
- Q21. Find the length of line between (-3, 7) and (2, -1). (CBSE 2022)
- Q22. If A(1, 2), B(4, y), C(x, 6) and centroid is (3, 4), find x and y. (CBSE 2023)
- Q23. Find a point on x-axis equidistant from (2, -5) and (-2, 9). (CBSE 2016)
- Q24. Find the ratio in which x-axis divides AB with A(1, -5), B(-4, 5). (CBSE 2021)
- Q25. Find the area of triangle formed by A(2, 3), B(-4, 7), C(5, -2). (CBSE 2020)

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Answer Key:



15. P = (3.29, 0.29)

17. 5 units

18. Area = 13 units²

19. Slopes equal ⇒ Collinear

20. C = (2, 1)

21. √89 ≈ 9.43

22. x = 5, y = 4

23. x = 0

24. Ratio = 1:2

25. Area = 11 units²
