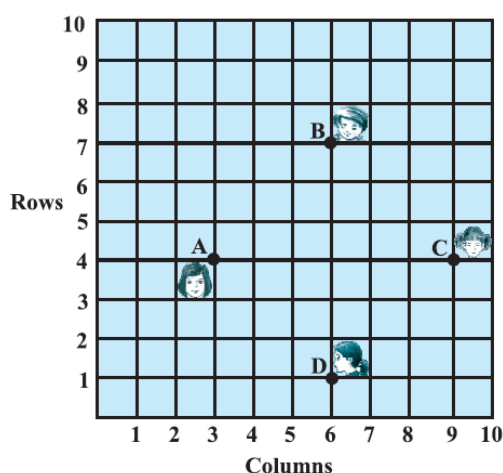


Name: \_\_\_\_\_

## The Distance and Midpoint Formulas

- 1) Find a point on the y-axis which is equidistant from the points A(6, 5) and B(- 4, 3)
- 2) Determine if the points (1, 5), (2, 3) and (- 2, - 11) are collinear.
- 3) Check whether (5, - 2), (6, 4) and (7, - 2) are the vertices of an isosceles triangle.
- 4) 4 friends are seated at the points A, B, C and D as shown. Chama and Chambal walk into the class and after observing for a few minutes Chama asks Chambal, "Don't you think ABCD is a square?" Chambal disagrees. Using distance formula, find which of them is correct.



- 5) Name the type of quadrilateral formed, if any, by the following points, and give reasons for your answer:
  - 1) (- 1, - 2), (1, 0), (- 1, 2), (- 3, 0)
  - 2) (-3, 5), (3, 1), (0, 3), (-1, - 4)
  - 3) (4, 5), (7, 6), (4, 3), (1, 2)