CHAPTER-7
COORDINATE GEOMETRY

1 EXERCISE - 7.1

1. Find the distances between the following pairs of points:

   (a) (2,3),(4,1)

   (b) (-5,7),(-1,3)

   (c) (a,b),(-a,-b)

2. Find the distance between the points (0,0) and (36,15),Can you now find the distances between the two towns A and B discussed in Section 7.2 .

3. Determine if the points(1,5),(2,3) and (-2,-11) are collinear.

4. Check whether(5,-2),(6,4)and (7,-2) are the vertices of an isosceles triangle.

5. In a classroom, 4 friends are seated at the points A,B,C and D as shown in Fig. 7.8, Champa and Chameli walk in to the class and after observing for a few minutes Champa asks Chameli,"Dont't you think ABCD is a square?" Chameli disagrees,Using distance formula, find which of them is correct.

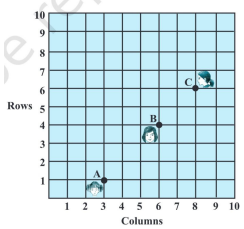

Fig. 7.6

6. Name the type of quadrilateral formed,if any,by the following points,and give reasons for your answer:

   (a) (-1,-2),(1,0),(-1,2),(-3,0)

(b) (-3,5),(-3,1),(0,3),(-1,-4)

(c) (4,5),(7,6),(4,3),(1,2)

7. Find the point on the x-axis which is equidistant from(2,-5)and(-2,9).

8. Find the values of y for which the distance between the points P(2,-3)andQ(10,y)is10 units.

9. If Q(0, 1) is equidistant from P(5, –3) and R(x, 6), find the values of x. Also find the distances QR and PR.

10. 10. Find a relation between x and y such that the point (x, y) is equidistant from the point (3, 6) and (– 3, 4).