LATEX ASSIGNMENT

ANAND

25-08-2023

EXERCISE 10.7.1

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

   (i) $(2,3),(4,1)$

   (ii) $(-5,7),(-1,3)$

   (iii) $(a,b),(-a,b)$

2. Find the distance between the points $(0,0)$ and $(36,15)$. Can you now find the two town 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 isoceles triangle.

5. In a classroom, 4 friends are seated at the points A, B, C and D as shown Fig. 1 in Champa and chameli walk into the class and after observing for a fwe minutes champa asks chameli, "Don't you think ABCD is a square?"Chameli disagrees Using distance formula, find which of them is correct.

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

   (i) $(-1,2),(1,0),(-1,2),(3,0)$

   (ii) $(-3,5),(3,1),(0,3),(-1,-4)$

   (iii) $(4,5),(7,6),(4,3),(1,2)$

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 $P(2,-3)$ and $Q(10,y)$ is 10 units.

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

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

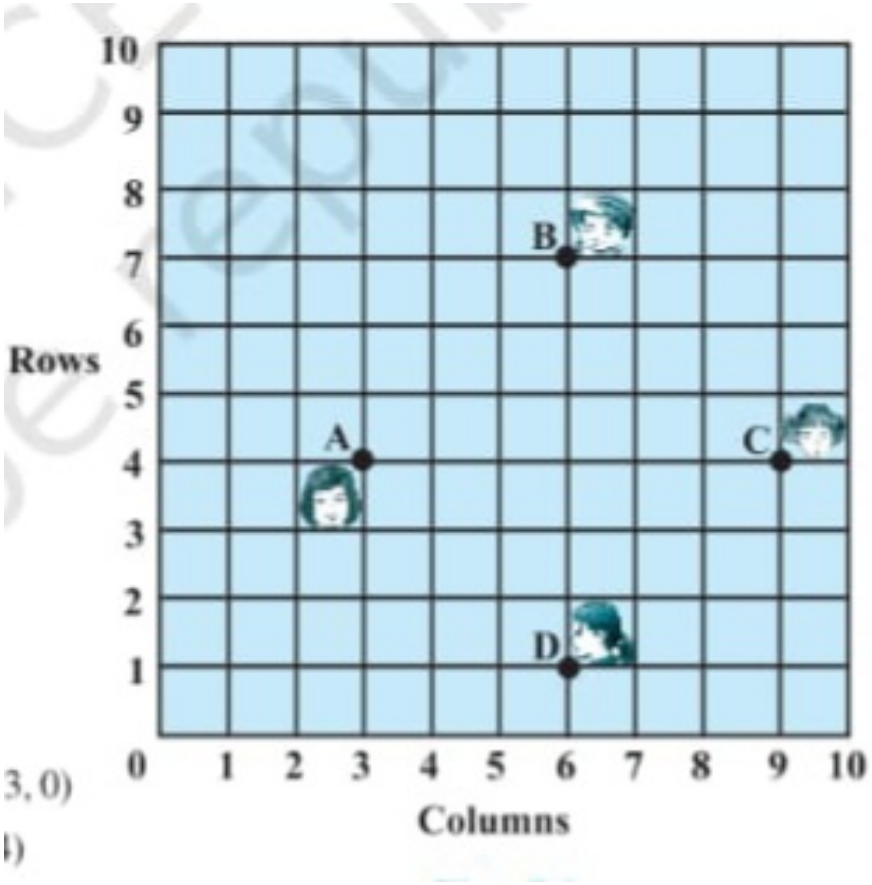

Figure 1: 7.8