MATHS

BOOKS - KALYANI MATHS (ASSAMESE ENGLISH)

COORDINATE GEOMETRY

Example

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

$(2, \ -3)$ and $(-4, 1)$

2. Find the distance between the following pair of points :

$(-3, \ -6)$ and $(5, \ -2)$.

3. If the distance between (x,6) and $(2, \ -2)$ is 10. Find x.

4. Prove that the points A(7,10), B(-2,5) and C(3,-4) are the vertices of an isosceles right angled triangle.

5. Find the coordinates of points equidistant from the three given points A(5,3) , B(5,-5) and C(1,-5).

6. Find the coordinates of the point which divides the join of (-1,7) and (4,-3) in the ratio 2:3.

7. Find the ratio in which the point P$\left(\dfrac{3}{4}, \dfrac{5}{12}\right)$ divides the line segment joining the points A$\left(\dfrac{1}{2}, \dfrac{3}{2}\right)$ and B(2,-5).

8. Find the ratio in which the point P(m,6) divide the joint of A(-4,3) and B(2,8). Also determine m.

9. Let A(3,-1) and B(8,9) be two points in what ratio does the line x-y-2 = 0 divide the line segment AB.?

10. Let A(3,-1) and B(8,9) be two points

In what ratio does the x-axis intersect the line segment AB?

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11. If three consecutive vertices of a parallelogram ABCD are A(1,-2),B(3,6),C(5,10), then find the fourth vertex D.

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12. Find the area of a triangle whose vertices are A(3,8) ,B(-4,2) and C(5,-1).

13. A(-4,-2),B(-3,-5),C(3,-2) and D(2,k) at the vertices of a quadrilateral ABCD. Find the value of k if the area of the quadrilateral is 28 square unit.

14. Show that the point A(-5,1),B(5,5) and C(10,7) are collinear.

15. Find the relation between x and y if the points A(2,1),B(x,y) and C(7,5) are collinear.

16. Find the area of the triangle ABC with A(1,-4) and the midpoints of the sides through A being (2,-1) and (0,-1).