INDIAN SCHOOL NIZWA - WORKSHEET

MATHEMATICS

7. Coordinate Geometry

Name: _____ Date:_____ Class: X Sec: ___

1.	Find the distance between (i) P (-7, 1) and Q (4 ,-1) (ii) K(-a ,a) and L(a,0)
2.	Prove that the points A(2 , -2),B (-3 , 8) and C (-1 , 4) are collinear.
3.	Prove that the points A(-3 , 2),B (-5 , -5), C (2 , -3) and D (4 , 4) are the vertices of a rhombus.
4.	Prove that the points A (7 , 10), B(-2 , 5) and C(3 , -4) are the vertices of an isosceles right triangle
5.	Prove that the points A (2 ,-2), B(14 ,10), C (11 ,13) and D (-1 ,1) are the vertices of a rectangle.
6.	Find a point on X-axis which is equidistant from A (7, 6) and B (-3 , 4).
7.	Find a point on Y- axis which is equidistant from A (5 ,-2) and B (-3 ,2).
8.	P(x ,y) is equidistant from A(1 , 4) and B (-1 , 2). Prove that x + y = 3.
9.	The point P (2 , 2) is equidistant from A (-2 , k) and B (-2k ,-3). Find the value of k.
10.	The distance between A(x, 5) and B (9, -1) is 10 units, find x.
11.	A(3,-1) and B(5,7) is divided by P (x , y) in the ratio 2:3. Find P.
12.	P(0,-3) is the mid point of A(-5, y) and B(x,-1). Find x and y.
13.	P(-3, 2) divides the join of A(-1 , y) and B(x ,-6) in the ratio 2:3. Find x and y.
14.	If (3,3), (6,y),(x,7) and (5,6) are the vertices of a parallelogram. Find x and y.
15.	In what ratio does the point (1,-6/5) divides the line segment joining the points A(-1,0) and B(4,-3) ?
16.	Determine the ratio in which P(m,6) divides the line segment joining the points A(-4,3) and B(2,8). Also find the value of m.
17.	Find the ratio in which the line segment joining A(6,4) and B(1,-7) is divided by the x- axis . Also find x.

18.	Find the ratio in which the line segment joining A(5,-6) and B(-1,-4) is divided by the y- axis . Also find y.
19.	Find the points of trisection of the points A(9,1) and B(4,-3).
20.	Find the points which divide AB into 4 equal parts , where A is (1,6) and B(3,-4).
21.	Find the ratio in which the line $x - y = 2$ divides the join of A(3,-1) and B(8,9).
22.	P divides the line segment joining the points A(2,1) and B(5,-8) such that AP: BP = 1:3. If P lies on the line $2x - y + k = 0$, find the value of k.
23.	Find the point P(x ,y) which divides the join of A(-1,7) and B(5,-2) such that AP : AB = 2: 7.