

Class: X
Subject: Math's
Topic: Coordinate geometry
No. of Questions: 20

- Q.1 Find the distance between the points A(-6, 7) and B(-1, -5).
- Q.2 Find a point on x-axis which is equidistant from A(2,-5) and B(-2,9). (CBSE-2009)
- Q.3 The x-coordinate of a point P is twice its y-coordinate. If P is equidistant from Q(2, -5) and R(-3,6), then find the coordinates of P. (CBSE-2010)
- Q.4 Show that A(6,4), B(5,-2) and C(7,-2) are the vertices of an isosceles triangle. Also, find the length of the median through A. (CBSE-2010)
- Q.5 Determine the ratio in which the line $3x + y - 9 = 0$ divides the segment joining the points (1,3) and (2,7). (CBSE-2008)
- Q.6 If A(-2,-1), B(a,0), C(4,b) and d(1,2) are the vertices of a parallelogram, find the values of a and b. (CBSE-2006)
- Q.7 If A(5,-1), B(-3,-2) and C(-1,8) are the vertices of ΔABC , find the length of median through A and the coordinates of the centroid. (CBSE-2006)
- Q.8 Find the coordinates of the centroid of a triangle whose vertices are (0,6), (8,12) and (8,0).
- Q.9 If $x - 2y + k = 0$ is a median of the triangle whose vertices are at points A(-1,3), B(0,4) and C(-5,2), find the value of k.
- Q.10 Find the area of the triangle whose vertices are $(t, t - 2)$, $(t + 2, t + 2)$ and $(t + 3, t)$
- Q.11 Prove that the points $(a, b + c)$; $(b, c + a)$ and $(c, a + b)$ are collinear. (CBSE-2010)
- Q.12 For what value of x will the points $(x, -1)$, $(2,1)$ and $(4,5)$ lie on a line? (CBSE-2013)

- Q.13 If $P(x,y)$ is any point on the line joining the points $A(a,0)$ and $B(0,b)$, then find the value of $x/a + y/b$. (CBSE-2009)
- Q.14 Find k so that the point $P(-4,6)$ lies on the line segment joining $A(k,10)$ and $B(3,-8)$. Also, find the ratio in which P divides AB . (CBSE-2010)
- Q.15 Three vertices of a parallelogram $ABCD$ are $A(3,-4)$, $B(-1,-3)$ and $C(-6,2)$. Find the coordinates of vertex D and find the area of the parallelogram $ABCD$. (CBSE-2013)
- Q.16 If the area of $\triangle ABC$ formed by $A(x,y)$, $B(1,2)$ and $C(2,1)$ is 6 square units, then prove that $x+y=15$ or $x+y+9=0$. (CBSE-2010)
- Q.17 Find the area of the quadrilateral, the coordinates of whose vertices are $(-3,2)$, $(5,4)$, $(7,-6)$ and $(-5,-4)$.
- Q.18 If the points $A(1,-2)$, $B(2,3)$, $C(-3,2)$ and $D(4,-3)$ are the vertices of a parallelogram $ABCD$, then taking AB as the base, find the height of the parallelogram. (CBSE-2013)
- Q.19 If the points (p,q) , (m,n) and $(p - m, q - n)$ are collinear, show that $pn=qm$. (CBSE-2010)
- Q.20 Find the area of a triangle whose vertices are $A(3,2)$, $B(11,8)$ and $C(8,12)$