

ECAT Mathematics Chapter 20 Analytic Geometry

Sr	Questions	Answers Choice
1	The points $(-1,3)$, $(3,0)$ are the vertices of:	A. Right-angled triangle B. Isosceles triangle C. Equilateral triangle D. square
2	The medians of a triangle are:	A. Collinear B. Concurrent C. Perpendicular D. zero
3	The distance of a point $(x \cos \theta, x \sin \theta)$ from origin is:	A. x B. $x \tan \theta$ C. $-\tan \theta$ D. $-\cot \theta$
4	The length of perpendicular from $(3,1)$ to the line $4x + 3y + 20 = 0$ is:	A. 7 B. 5 C. 11 D. 12
5	If points $(5, 5)$, $(10, x)$ and $(-5, 1)$ are collinear, $x =$	A. 5 B. 3 C. 9 D. 7
6	The distance from the point $P(3,4)$ to the line $y = 2x - 3$ is:	A. $\sqrt{5}$ B. $\sqrt{3}$ C. $2\sqrt{3}$ D. $1/\sqrt{5}$
7	Shifting origin to $(-4,-6)$, the new coordinates of $(-6,-8)$ are:	A. $(-1,2)$ B. $(-2,-2)$ C. $(1,-2)$ D. $(3,-2)$
8	If the points (a,b) , (x,y) and $(a-x, b-y)$ are collinear, then $ay =$	A. bx B. $b-y$ C. $a-x$ D. x
9	The points $(5,2)$, $(-2,3)$, $(-3,-4)$ and $(4,-5)$ are the vertices of:	A. rhombus B. Parallelogram C. rectangle D. square
10	Axes remain parallel to the old axes, in:	A. Translating of axes B. rotation of axes C. Translation and rotation of axes D. None of these
11	The equation of the line through $(-8, 5)$ having slope undefined is:	A. $y + 8 = 0$ B. $y = 8$ C. $y = x + 8$ D. $x + 8 = 0$
12	In $\triangle ABC$ the mid points of AB and AC are $(3,5)$ and $(-3,-1)$ respectively, then the length of the side BC is:	A. 15 B. 10 C. 30 D. 20
13	The quadrilateral with the vertices $(-3,-2)$, $(2,-1)$, $(3,4)$ and $(-2,3)$ is a:	A. Square B. Rectangle C. rhombus D. parallelogram
14	The points A, B and C are said to be collinear if they:	A. be on same line B. have same slope C. Lie on a same plane D. options a & b
15	The two lines $x + y = 0$ and $2x - y + 3 = 0$ intersect at the point:	A. $(-1,1)$ B. $(2,3)$ C. $(1,3)$ D. $(-1,2)$

16	If (x,y) are the coordinates of a point P, then the first number of the ordered pair is called:	A. Ordinate B. Abscissa C. quadrant D. Cartesian
17	The two lines $5x + 7y = 35$ and $3x - 7y = 21$, intersect at the point:	A. (7,5) B. (1,2) C. (2,7) D. (7,0)
18	The two vertices of a triangle are $(-2,4)$ and $(5,4)$. If its centroid is $(5,6)$, then third vertex is:	A. $(-10,12)$ B. $(12,-10)$ C. $(12,10)$ D. $(10,12)$
19	The cartesian system of coordinates was introduced by:	A. Eulaer B. Euclid C. Descrates D. MacIream
20	In translation of axes, _____ is shifted to another point in the plane.	A. a-axis B. y-axis C. origin D. Point