

ECAT Mathematics Chapter 20 Analytic Geometry

Sr	Questions	Answers Choice
1	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
2	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)
3	The distance from the point P(6,-1) to the line $6x - 4x + 9 = 0$ is:	A. 5/7 B. $\sqrt{52}/7$ C. 2/48 D. $49/\sqrt{52}$
4	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)
5	The points (-1,3), (3,0) are the vertices of:	A. Right-angled triangle B. Isosceles triangle C. Equilateral triangle D. square
6	The medians of a triangle are:	A. Collinear B. Concurrent C. Perpendicular D. zero
7	In $\square ABC$ 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
8	Shifting origin to (1,-2), the new coordinates of (4,5) are:	A. (3,7) B. (5,3) C. (-3,7) D. (3,-7)
9	The equation of the line through (-8, 5) having slope undefined is:	A. $y + 8 = 0$ B. $y = 8$ C. $y = x + 8$ D. $x + 8 = 0$
10	The length of perpendicular from (3,1) to the line $4x + 3y + 20 = 0$ is:	A. 7 B. 5 C. 11 D. 12
11	The coordinates of a point which trisects segment joining (0,0) and (9,12) are:	A. (4,3)(8,6) B. (4,3)(6,8) C. (3,4)(6,8) D. (3,4)(8,6)
12	The distance between two parallel lines $2x - 5y + 13 = 0$ and $-2x + 5y - 6 = 0$ is:	A. $\sqrt{29}$ B. $8/\sqrt{29}$ C. $7/\sqrt{29}$ D. $29\sqrt{7}$
13	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
14	The distance between the parallel lines $3x - 4y + 3 = 0$ and $3x - 4y + 7 = 0$ is:	A. 2/3 B. 9/13 C. 4/5 D. 7/12
15	Shifting origin to (-3,2), the new coordinate of (-2,6) are:	A. (1,4) B. (2,4) C. (-1,3) D. (-1,4)

16	In translation of axes, _____ is shifted to another point in the plane.	A. a-axis B. y-axis C. origin D. Point
17	The points (5,2),(-2,3),(-3,-4) and (4,-5) are the vertices of:	A. rhombus B. Parallelogram C. rectangle D. square
18	If points (-1 , h), (3,2) and (7,3) are collinear then h=	A. 3 B. 4 C. 0 D. None of these
19	Shifting origin to (-3,2), the new coordinates of (-6,9) are:	A. (-9,7) B. (3,7) C. (-3,7) D. (3,-7)
20	The points (3,1), (-2,-3) and (2,2) are the vertices of :	A. Equilateral triangle B. Isosceles triangle C. right -angled triangle D. rhombus
