

## ECAT (Pre-Eng) Mathematics Chapter 20 Analytic Geometry

Sr	Questions	Answers Choice
1	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)
2	In translation of axes, _____ is shifted to another point in the plane.	A. a-axis B. y-axis C. origin D. Point
3	The equation of the line through (-8, 5) having slope undefined is:	A. $y + 8 = 0$ B. $y = 8$ C. $y = x + 8$ D. $x + 8 = 0$
4	If the line is parallel to the y-axis, then m is said to be:	A. zero B. undefined C. 1/2 D. -1
5	Shifting origin to (-3,2), the new coordinates of (-6,9) are:	A. (-9,7) B. (3,7) C. (-3,7) D. (3,-7)
6	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. $49/\sqrt{52}$
7	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)
8	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
9	Shifting origin to (-4,-6), the new coordinates of (-6,-8) are:	A. (-1,2) B. (-2,-2) C. (1,-2) D. (3,-2)
10	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)
11	If points A (6,-1), B (1,3) and C (x,8) are such that AB=BC, then x =	A. 3,5 B. -3,5 C. 3,-5 D. -3,-5
12	Shifting origin to (-3,2), the new coordinate of (-2,6) are:	A. (1,4) B. (2,4) C. (-1,3) D. (-1,4)
13	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. $29\sqrt{7}$
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	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. $1/\sqrt{5}$

16	The points (-1,3), (3,0) are the vertices of:	A. Right-angled triangle B. Isosceles triangle C. Equilateral triangle D. square
17	If points (5 , 5), (10 , x) and (-5 , 1) are collinear, x =	A. 5 B. 3 C. 9 D. 7
18	Three points (-2,2) (8,-2) and (-4,3) are vertices of a :	A. Isosceles triangle B. right-angled triangle C. Equilateral triangle D. Rectangle
19	The length of perpendicular from (3,1) to the line $4x + 3y + 20 = 0$ is:	A. 7 B. 5 C. 11 D. 12
20	If points (-1 , h), (3,2) and (7,3) are collinear then h=	A. 3 B. 4 C. 0 D. None of these