

ECAT Mathematics Chapter 20 Analytic Geometry

Sr	Questions	Answers Choice
1	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
2	The length of perpendicular from (3,1) to the line $4x + 3y + 20 = 0$ is:	A. 7 B. 5 C. 11 D. 12
3	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. $29\sqrt{7}$
4	In translation of axes, _____ is shifted to another point in the plane.	A. a-axis B. y-axis C. origin D. Point
5	The cartesian system of coordinates was introduced by:	A. Eulaer B. Euclid C. Descrates D. Macream
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	Bisectors of angles of a triangle are:	A. Collinear B. Concurrent C. Perpendicular D. zero
8	x-axis divides the line segment joining points (2,-3) and (5,6) in the ratio:	A. 2 : 1 B. -2 : 1 C. 1 : 2 D. -1 : 2
9	If points (5, 5), (10, x) and (-5, 1) are collinear, x =	A. 5 B. 3 C. 9 D. 7
10	Three points (-2,2) (8,-2) and (-4,3) are vertices of a :	A. Isosceles triangle B. right-angled triangle C. Equilateral trainagle D. Rectangle
11	Shifting origin to (-3,2), the new coordinates of (-6,9) are:	A. (-9,7) B. (3,7) C. (-3,7) D. (3,-7)
12	Shifting origin to (-4,-6), the new coordinates of (-6,-8) are:	A. (-1,2) B. (-2,-2) C. (1,-2) D. (3,-2)
13	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)
14	The points (a,0), (0,b) and (3a, -2b) are:	A. Collinear B. Vertices of isosceles triangle C. corner of a right-angled triangle D. None of these
15	The medians of a triangle are:	A. Collinear B. Concurrent C. Perpendicular D. zero

16 The points $(5,2),(-2,3),(-3,-4)$ and $(4,-5)$ are the vertices of:
A. rhombus
B. **Parallelogram**
C. rectangle
D. square

17 The quadrilateral with the vertices $(-3,-2)$, $(2,-1)$, $(3,4)$ and $(-2,3)$ is a:
A. Square
B. **Rectangle**
C. rhombus
D. parallelogram

18 The equation of the line through $(-8, 5)$ having slope undefined is:
A. $y + 8 = 0$
B. $y = 8$
C. $y = x + 8$
D. **$x + 8 = 0$**

19 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. **$1/\sqrt{5}$**

20 The points $(0,-1)$, $(2,1)$, $(0,3)$ and $(-2,1)$ are the corner of:
A. **Square**
B. rhombus
C. Parallelogram
D. rectangel
