

ECAT Pre General Science Mathematics Chapter 20 Analytic Geometry Online Test

Sr	Questions	Answers Choice
1	The cartesian system of coordinates was introduced by:	A. Eulaer B. Euclid C. Descrates D. MacIream
2	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
3	The points (5,2),(-2,3),(-3,-4) and (4,-5) are the vertices of:	A. rhombus B. Parallelogram C. rectangle D. square
4	The quadrilateral with the vertices (-3,-2), (2,-1), (3,4) and (-2,3) is a:	A. Square B. Rectangle C. rhombus D. parallelogram
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 points (0,-1), (2,1),(0,3) and (-2,1) are the corner of:	A. Square B. rhombus C. Parallelogram D. rectangel
7	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
8	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
9	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
10	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
11	If points (-1 , h), (3,2) and (7,3) are collinear then h=	A. 3 B. 4 C. 0 D. None of these
12	If a point (p,q) is equidistant from the points (5,3) and (-2,-4), then p+ q =	A. -1 B. 1 C. 3 D. -3
13	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
14	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
15	The medians of a triangle are:	A. Collinear B. Concurrent C. Perpendicular D. zero

16	Bisectors of angles of a triangle are:	A. Collinear B. Concurrent C. Perpendicular D. zero
17	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
18	The distance of a point $(x \cos \theta, x \sin \theta)$ from origin is:	A. x B. $x \tan \theta$ C. $-\tan \theta$ D. $-\cot \theta$
19	The in-centre of triangle whose vertices are (0,0), (5,12) and (16,12) is:	A. (9,7) B. (2,7) C. (9,2) D. (7,9)
20	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)
21	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)
22	If points (5, 5), (10, x) and (-5, 1) are collinear, x =	A. 5 B. 3 C. 9 D. 7
23	Shifting origin to (-3,2), the new coordinates of (-6,9) are:	A. (-9,7) B. (3,7) C. (-3,7) D. (3,-7)
24	Shifting origin to (-3,2), the new coordinate of (-2,6) are:	A. (1,4) B. (2,4) C. (-1,3) D. (-1,4)
25	Shifting origin to (1,-2), the new coordinates of (4,5) are:	A. (3,7) B. (5,3) C. (-3,7) D. (3,-7)
26	Shifting origin to (-4,-6), the new coordinates of (-6,-8) are:	A. (-1,2) B. (-2,-2) C. (1,-2) D. (3,-2)
27	In translation of axes, _____ is shifted to another point in the plane.	A. a-axis B. y-axis C. origin D. Point
28	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
29	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
30	The slope of the line from B (2,-3) through A (0,3) is:	A. -3 B. 1/3 C. 0 D. undefined
31	If the line is parallel to the y-axis, then m is said to be:	A. zero B. undefined C. 1/2 D. -1
32	The equation of the line through (-8, 5) having slope undefined is:	A. $y + 8 = 0$ B. $y = 8$ C. $y = x + 8$ D. $x + 8 = 0$
33	The two lines $x + y = 0$ and $2x - y + 3 = 0$ intersect at the point:	A. (-1,1) B. (2,3) C. (1,3)

		$\frac{5}{\sqrt{2}}$ D. $(-1,2)$
34	The two lines $5x + 7y = 35$ and $3x - 7y = 21$, intersect at the point:	A. $(7,5)$ B. $(1,2)$ C. $(2,7)$ D. $(7,0)$
35	The distance from the point $P(6,-1)$ to the line $6x - 4x + 9 = 0$ is:	A. $\frac{5}{7}$ B. $\frac{\sqrt{52}}{7}$ C. $\frac{2}{48}$ D. $\frac{49}{\sqrt{52}}$
36	The length of perpendicular from $(-2,3)$ to the line $y = 2x - 3$ is:	A. $5\sqrt{2}$ B. 6 C. $2\sqrt{5}$ D. 7.5
37	The length of perpendicular from $(3,1)$ to the line $4x + 3y + 20 = 0$ is:	A. 7 B. 5 C. 11 D. 12
38	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. $\frac{1}{\sqrt{5}}$
39	The distance between two parallel lines $2x - 5y + 13 = 0$ and $-2x + 5y - 6 = 0$ is:	A. $\sqrt{29}$ B. $\frac{8}{\sqrt{29}}$ C. $\frac{7}{\sqrt{29}}$ D. $29\sqrt{7}$
40	The distance between lines $3x + 4y = 9$ and $6x + 8y = 15$ is:	A. $\frac{2}{3}$ B. $\frac{3}{10}$ C. 8 D. $\frac{6}{5}$
41	The distance between the parallel lines $3x - 4y + 3 = 0$ and $3x - 4y + 7 = 0$ is:	A. $\frac{2}{3}$ B. $\frac{9}{13}$ C. $\frac{4}{5}$ D. $\frac{7}{12}$