

FA Part 2 Mathematics Full Book Test Online

Sr	Questions	Answers Choice
1	The vertex of the parabola $y^2 = 4ax$ is:	A. $(-a, 0)$ B. $(a, 0)$ C. $(0, -a)$ D. $(0, 0)$
2	The opening of the parabola $y^2 = 4ax$ is to the _____ of the:	A. Left B. Upward C. Right D. Downward
3	The graph of linear equation of the form $ax + by = c$ is a _____ where a, b and c are constants and a, b are not both zero.	A. Curve B. Circle C. Straight line D. Parabola
4	Question Image <input type="text"/>	A. R B. $R - \{2\}$ C. $R - \{2, -2\}$ D. $R - \{-2\}$
5	The number e denotes the _____ of the conic:	A. Directrix B. Vertex C. Focus D. Eccentricity
6	The derivative of x with respect to y is given by:	
7	Question Image <input type="text"/>	A. a B. b C. c D. a + b
8	Question Image <input type="text"/>	A. Continuous at $x = 1$ B. Not continuous at $x = 1$ C. Both a and b D. none
9	Question Image <input type="text"/>	A. Common logarithmic B. Natural logarithmic C. Exponential D. None of these
10	$y = mx + c$ is the equation of straight line in:	A. Slope-intercept form B. Two points from C. Point slope form D. Intercepts form
11	Question Image <input type="text"/>	A. 0
12	A parallelogram is a rhombus if and only if its diagonals are:	A. Parallel B. Perpendicular C. Equal D. None of these
13	The vertex of the parabola $y^2 = -4ax$ is:	A. $(-a, 0)$ B. $(a, 0)$ C. $(0, -a)$ D. $(0, 0)$
14	The parabola $y^2 = 4ax$ lies in quadrants:	A. I and II B. III and IV C. II and III D. I and IV
15	Question Image <input type="text"/>	A. equal to each other B. not equal to each C. nearly equal to each other D. none of these
16	Perpendicular dropped from the center of a circle on a chord _____ the chord:	A. Normal B. Bisects C. Equal to D. None of these

17	Question Image <input type="text"/>	A. $\sin x$ B. $\cos x$ C. $\sinh x$ D. $\cosh x$
18	Question Image <input type="text"/>	A. 4, -4 B. 0 C. 2, -2 D. 0, 4
19	Length of tangent from (0,1) to $x^2 + y^2 + 6x - 3y + 3 = 0$	A. 2 B. 1 C. 4 D. 3
20	If $y = \sin x$ then $dy =$	A. $\cos y \, dx$ B. $\cos x$ C. $\cos x \, dx$ D. $\cos x \, dy$