

## FA Part 2 Mathematics Full Book Test Online

Sr	Questions	Answers Choice
1	Sir Isaac Newton was a(an) ----- mathematician.	A. German B. French C. Swiss D. English
2	In equation of circle, coefficient of each of $x^2$ and $y^2$ are:	A. Not equal B. Opposite in signs C. Equal D. None of these
3	A circle is of radius 5 cm, the distance of a chord 8 cm long from its center is:	A. 4 cm B. 3cm C. 2.5cm D. 3.4cm
4	If the inclination of the line $l$ lies between $]0^\circ, 90^\circ[$ , then the slope of $l$ is:	A. Positive B. Negative C. Undefined D. None of these
5	The condition for the line $y = mx + c$ to be a tangent to the circle $x^2 + y^2 = a^2$ is $c =$ _____:	
6	Angle between the lines $x + y + 1 = 0$ & $x - y + 4 = 0$ is:	A. $30^\circ$ B. $45^\circ$ C. $60^\circ$ D. $90^\circ$
7	<div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">Question Image</div>	A. 4 B. Does not exist
8	The vertical line $y'oy$ is called:	A. x-axis B. y-axis C. abscissa D. Ordinate
9	The ordered pair _____ is a solution of the inequality $x + 2y < 6$ .	A. (3, 3) B. (1, 1) C. (4, 4) D. (5, 5)
10	Equation of axis of the parabola $x^2 = 4ay$ is:	A. $x = 0$ B. $x = a$ C. $y = 0$ D. $y = a$
11	The graph of $2x + y < 2$ is the open half plane which is _____ the origin side of $2x + y = 2$ :	A. At B. Not an C. On D. None of these
12	If a straight line is perpendicular to y-axis, then its slope is:	A. 1 B. -1 C. 0 D. undefined
13	The general solution of differential equation of order $n$ contains $n$ arbitrary constants, which can be determined by ----- initial value conditions.	A. 1 B. 0 C. 2 D. $n$
14	If the cutting plane is slightly tilted and cuts only one nappe of the cone, then the section is a / an:	A. Ellipse B. Circular cone C. Circle D. Point circle
15	Distance of the point $(-2, 3)$ from y-axis is:	A. -2 B. 2 C. 3 D. 1
16	<div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">Question Image</div>	A. 1 B. 2 C. 3 D. 4

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- 17 Question Image
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- 18 If the focus lies on the y - axis with coordinates  $F(0, a)$  and directrix of the parabola is  $y = -a$ , then the equation of parabola is:
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- 19  $y = 2x + 3$  is the;
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- 20 Length of tangent from  $(a, 0)$  to the circle  $x^2 + y^2 + 2gx + 2fy + c = 0$  is:
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- A. Unit Vector  
B. Null vector  
C. Position vector  
D. None of these
- A.  $x^2 = 4ay$   
B.  $-x^2 = 4ay$   
C.  $-y^2 = 4ax$   
D.  $y^2 = 4ax$
- A. Slope-intercept form  
B. Two points form  
C. Point slope form  
D. Intercepts form
- B.  $c$   
C.  $2g + 2f - c$   
D. None
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