

## FSC Part 2 Mathematics Chapter 6 Online Test

Sr	Questions	Answers Choice
1	The length of the latus rectum of the parabola $y^2 = 4ax$ is:	A. a B. $4a$ C. $2a$ D. None of these
2	The conic is an ellipse, if:	A. $e = 1$ B. $e > 1$ C. $0 < e < 1$ D. $e = 0$
3	If the radius of a circle is zero, then the circle is called a / an:	A. Circle B. Circular cone C. Ellipse D. Point circle
4	The focus of the parabola $y^2 = -4ax$ is:	A. $(-a, 0)$ B. $(0, a)$ C. $(0, -a)$ D. $(a, 0)$
5	Question Image	A. a B. $2b$ C. b D. $2a$
6	Two arcs of two different circles are congruent if:	A. The circles are congruent B. The corresponding central angles are congruent C. Both a and b D. None of the above
7	The point of a parabola which is closest to the focus in the:	A. Directrix B. Vertex C. Focus D. Chord
8	The number $e$ denotes the _____ of the conic:	A. Directrix B. Vertex C. Focus D. Eccentricity
9	The directrix of the parabola $x^2 = -4ay$ is:	A. $x = a$ B. $x = -a$ C. $y = a$ D. $y = -a$
10	Point $(5, 6)$ lies ..... the circle $x^2 + y^2 = 81$ :	A. Outside B. Inside C. On D. None of these
11	The directrix of the parabola $y^2 = 4ax$ is:	A. $x = a$ B. $x = -a$ C. $y = a$ D. $y = -a$
12	The opening of the parabola $y^2 = -4ax$ is to the left of the:	A. x-axis B. $x = 1$ C. y-axis D. $x = 0$
13	If the cutting plane is parallel to the axis of the cone and intersects both of its nappes, then the section a / an:	A. Parabola B. Hyperbola C. Ellipse D. None of these
14	The axis of the parabola $y^2 = -4ax$ is:	A. $x = a$ B. $x = 0$ C. $y = a$ D. $y = 0$
15	The radius of circle $x^2 + y^2 + 2gx + 2fy + c = 0$ is:	A. Left

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The opening of the parabola  $y^2 = 4ax$  is to the \_\_\_\_\_ of the:

- B. Upward
- C. Right
- D. Downward

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A line segment whose end points lie on the circle is called a \_\_\_\_\_ of the circle.

- A. Radius
- B. Chord
- C. Diameter
- D. None of these

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Question Image

- A. Circle
- B. Parabola
- C. Hyperbola
- D. Ellipse

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A line perpendicular to a radial chord of a circle at the end-point (which lies on the circle) is a:

- A. Secant
- B. Diameter
- C. Chord
- D. Tangent

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The condition for the line  $y = mx + c$  to be a tangent to the circle  $x^2 + y^2 = a^2$  is  $c =$

\_\_\_\_\_: