



Class 11 Mathematics | Conic Sections

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. The centre of $x^2+y^2-4x+6y-12=0$ is:

A. (4,-6) B. (-2,3) C. (-4,6) D. (2,-3)

2. The radius of $x^2+y^2=49$ is:

A. 7 B. 49 C. $\sqrt{7}$ D. 14

3. The focus of $y^2=12x$ is:

A. (-3,0) B. (0,3) C. (3,0) D. (12,0)

4. The directrix of $y^2=8x$ is:

A. $y=2$ B. $x=2$ C. $x=-2$ D. $y=-2$

5. The length of the latus rectum of $y^2=20x$ is:

A. 20 B. 10 C. 5 D. 40

6. The parabola $x^2=-16y$ opens:

A. Leftward B. Rightward
C. Upward D. Downward

7. For $x^2/25+y^2/9=1$, the major axis length is:

A. 5 B. 16 C. 10 D. 6

8. The eccentricity of $x^2/25+y^2/9=1$ is:

A. $3/5$ B. $5/4$ C. $4/5$ D. $2/5$

9. The foci of $x^2/16+y^2/25=1$ are:

A. (0, ± 5) B. (± 4 ,0) C. (0, ± 3) D. (± 3 ,0)

10. For $x^2/9-y^2/16=1$, the transverse axis length is:

A. 8 B. 3 C. 6 D. 10

11. The eccentricity of $x^2/9-y^2/16=1$ is:

A. $3/4$ B. $5/3$ C. $3/5$ D. $4/3$

12. Which equation represents a circle?

A. $y^2=16x$ B. $x^2/16+y^2/9=1$
C. $x^2+y^2=16$ D. $x^2-y^2=16$

13. The vertex of $y^2=-4x$ is:

A. (-1,0) B. (1,0) C. (0,0) D. (0,-1)

14. The circle centred at (1,-2) with radius 3 is:

A. $(x-1)^2+(y+2)^2=9$ B. $(x+1)^2+(y-2)^2=9$
C. $x^2+y^2=9$ D. $(x-1)^2+(y+2)^2=3$

15. The eccentricity of any parabola is:

A. 0 B. 1 C. Greater than 1 D. Between 0 and 1

ANSWER KEY — check after completing all 15 questions

1.D 2.A 3.C 4.C 5.A 6.D 7.C 8.C 9.C 10.C 11.B 12.C 13.C 14.A 15.B

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper