

INTERNATIONAL INDIAN SCHOOL BURAIDAH

Worksheet for the Academic Year 2025-26

CLASS:11

SUBJECT: Mathematics

DATE: 24/10/25

LESSON : CONIC SECTIONS

1. Find the equation of circle which pass through (5, 9) and center at (2, 5).
2. If a circle pass through (2, 0) and (0, 4) and center at x-axis then find the radius of the circle.
3. Find the radius of the circle with equation $x^2+y^2-4x-10y+4=0$.
4. Find the equation of diretrix of parabola $y^2=100x$.
5. Equation of parabola which is symmetric about x-axis with vertex (0, 0) and pass through (3, 6).
6. Find the coordinates of foci of ellipse $\frac{x^2}{25} + \frac{y^2}{16} = 1$
7. If length of major axis is 10 and minor axis is 8 and major axis is along x-axis then find the equation of ellipse.
8. If foci of an ellipse are (0, ± 3) and length of semi major axis is 5 units, then find the equation of ellipse
9. Find the coordinates of foci of hyperbola $\frac{y^2}{16} - \frac{x^2}{9} = 1$
10. What is eccentricity for $\frac{x^2}{9} - \frac{y^2}{16} = 1$
11. The foci of a hyperbola coincides with the foci of the ellipse $\frac{x^2}{25} + \frac{y^2}{9} = 1$. Find the equation of the hyperbola if its eccentricity is 2 .
12. Write the eccentricity of an ellipse whose latus rectum one- half of the minor axis.