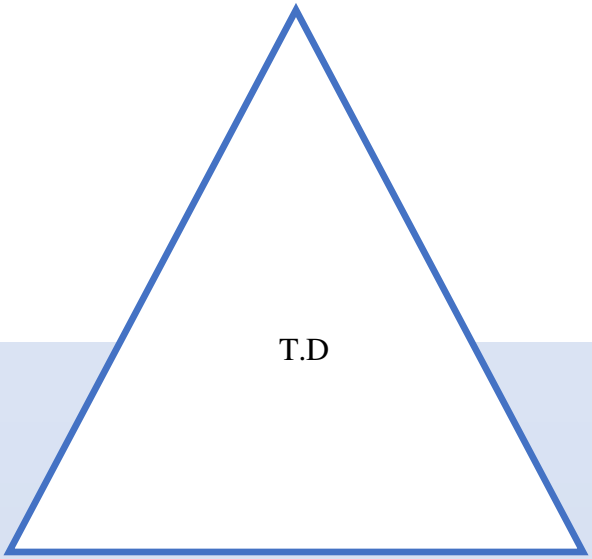
BA SANGAM COLLEGE

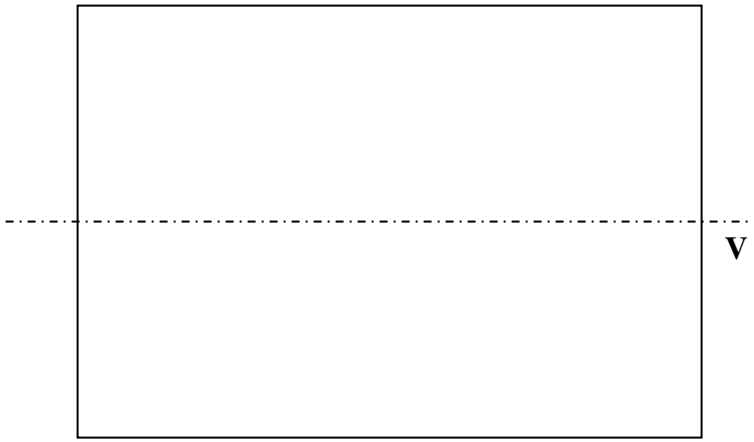
YEAR 12

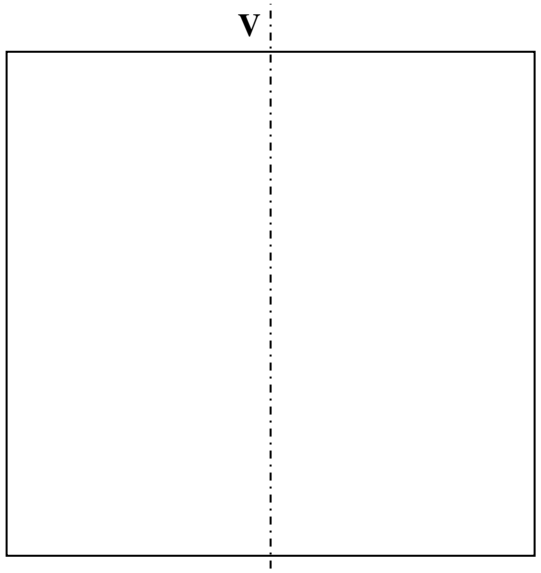
TECHNICAL DRAWING

WORKSHEET 3

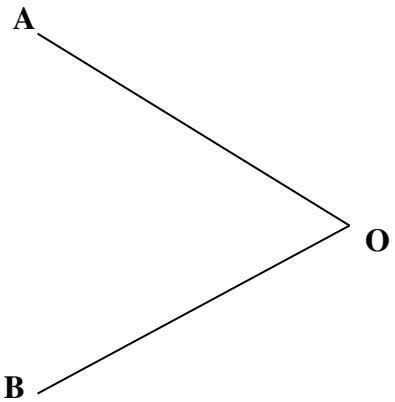


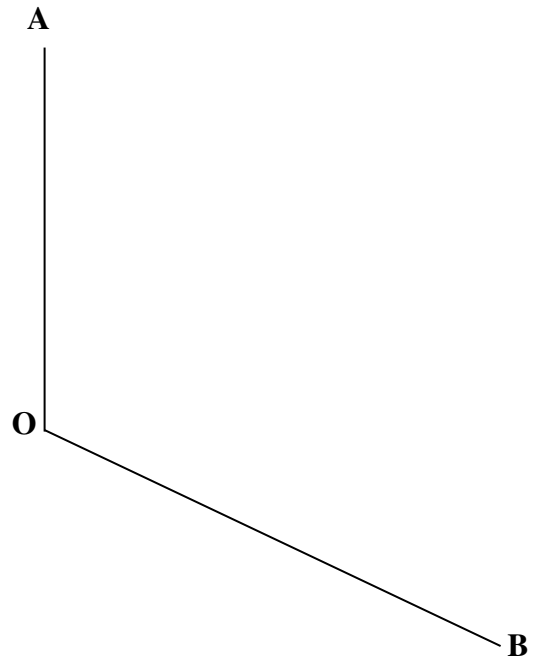
Given the vertex and the enclosing rectangle, construct a parabolic curve within, using **radial intersection method**.





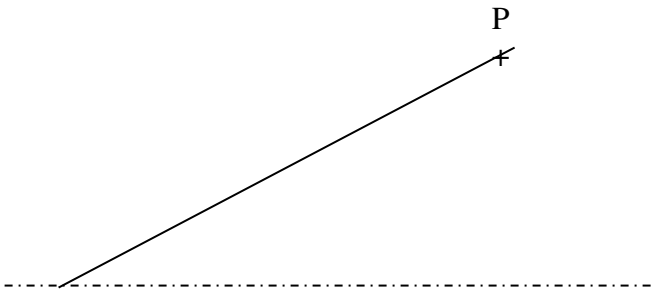
In each case, join the given points **A** and **B** by a parabolic curve assuming **O** to be the point of tangency.



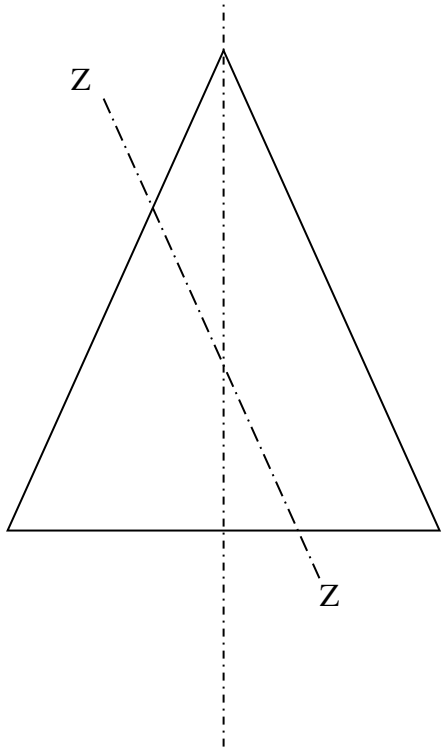


CONIC SECTION - PARABOLA

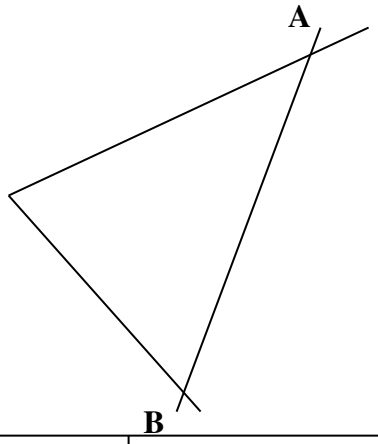
Given the axis, a point **P** on the curve and a tangent through point **P**, construct the parabolic curve.



Given the elevation of a cone cut by a cutting plane **Z-Z**, construct a focal sphere and project the true shape of the section, focal point and the directrix.

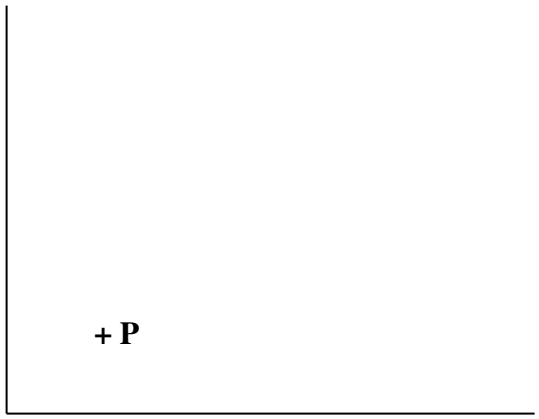


If the given focal chord touches the curve at **A** and **B** and given the tangents to the curve at **A** and **B**, construct the parabolic curve.

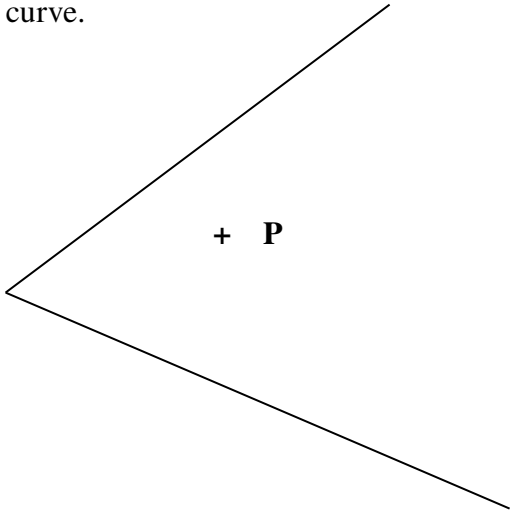


CONIC SECTION – PARABOLA

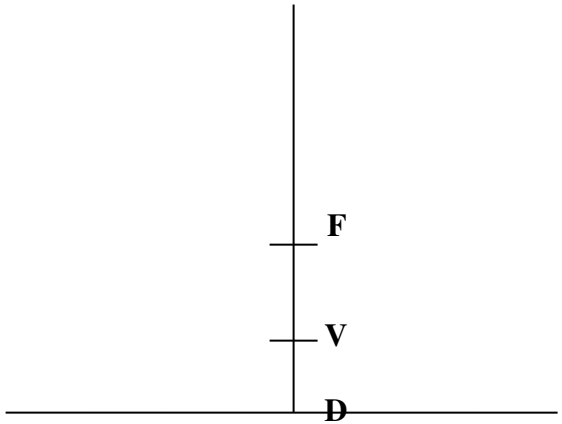
Given the asymptotes and a point **P** on the curve.
Construct the **hyperbola** passing through point **P**.



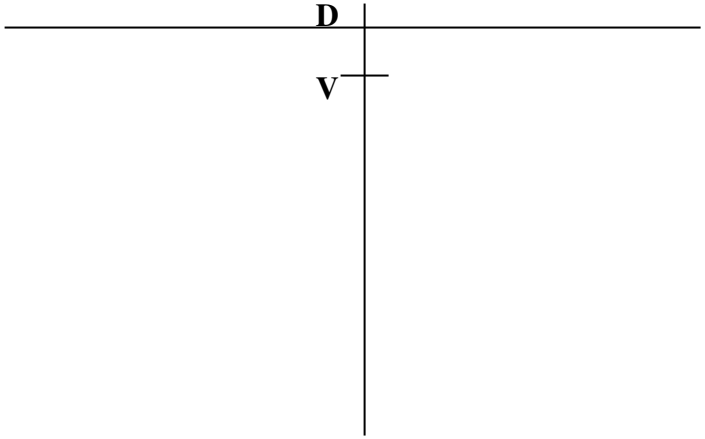
Given the asymptote and the point **P** on the curve, construct the **hyperbolic** curve.



Given the axis, the vertex, the focal point and the directrix,
Construct the hyperbolic curve.
What is the ratio of eccentricity? _____

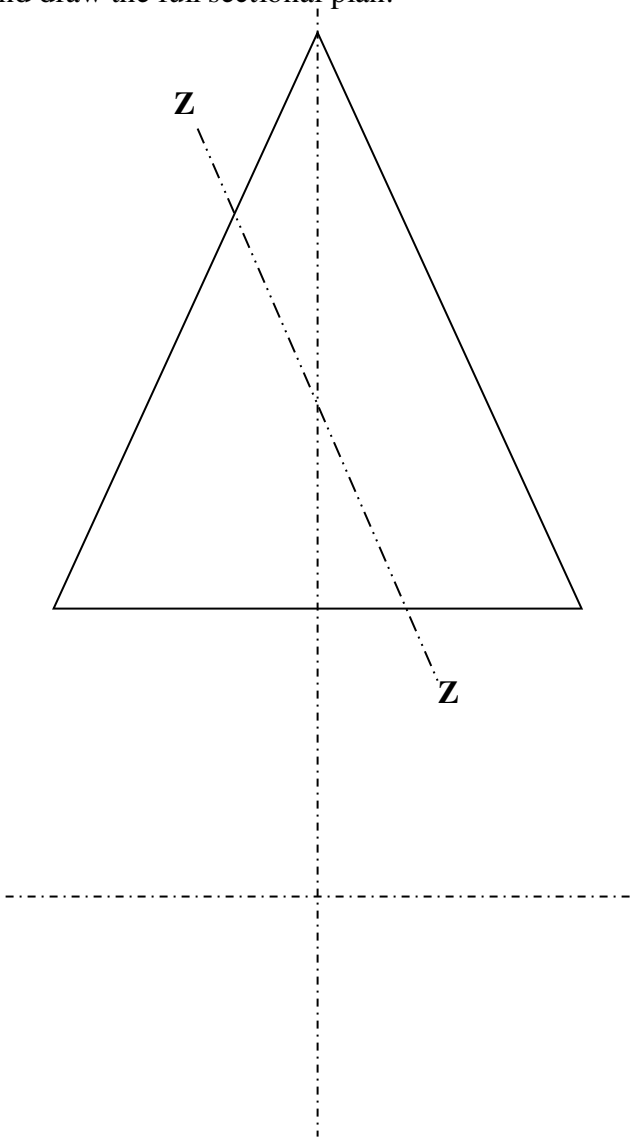


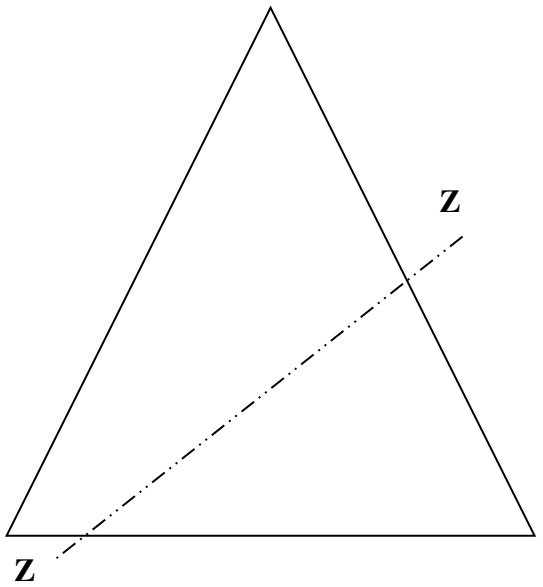
Given the axis, the directrix and the vertex, construct a hyperbolic curve with a eccentricity of **3:2.**



CONIC SECTION- HYPERBOLA

Given the cone cut by a cutting plane. Draw the true shape of the section and draw the full sectional plan.





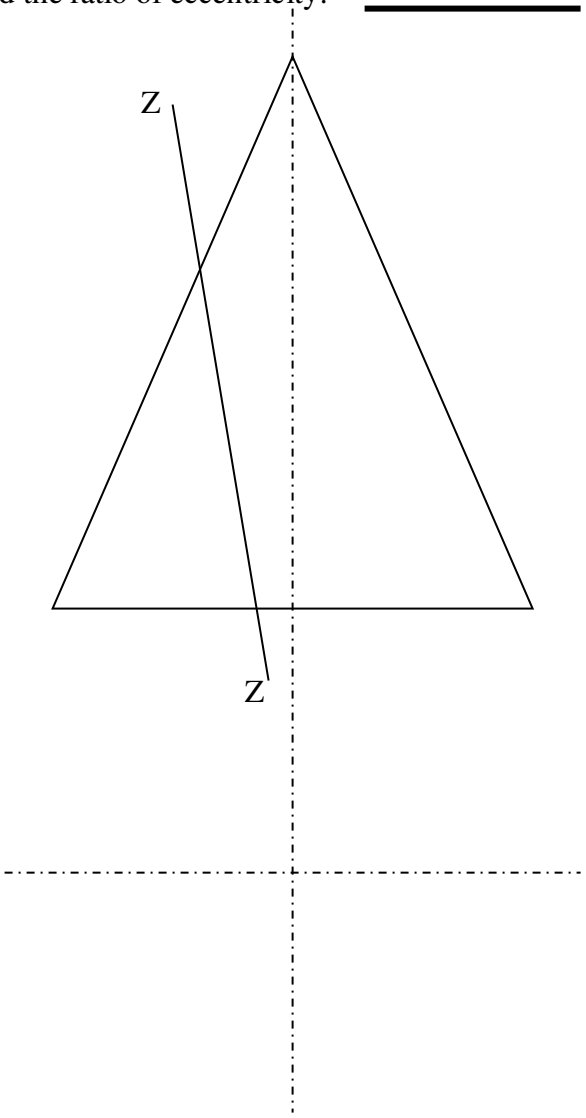
CONIC SECTION

1. The diagram below gives a cone cut by the cutting plane Z-Z.

(i) Draw the focal sphere, directrix, vertex and focus.

(ii) Draw the true shape and complete the sectional plan.

(iii) Find the ratio of eccentricity.



2. A cone shown below is cut by a cutting plane **Z-Z** .Locate the focus, vertex and the directrix and draw the true shape.