

Answer on Question#38431 – Math – Geometry

Using cone illustrate how different types of conic sections are generated

Solution:

Conic sections are observed by the intersection of a plane and a cone. The different forms result from the different angles between the plane and the vertical axis of the cone. If the plane is perpendicular to the cone, the intersect is a circle; if parallel but offset, the intersect is a parabola. In between the intersect is and ellipse If the plane angle lies between the vertical and the slope of the cone surface, the intersect is a hyperbola. See the illustration:

(Types of conic sections:

1. Parabola
2. Circle and ellipse
3. Hyperbola):

