



Advanced Math Concepts 3rd Grading Period

Power Objective:

- Translate between the geometric description and the equation for a conic section. (P.O. #11)

Academic Vocabulary:

- circle
- ellipse
- parabola
- hyperbola
- asymptote
- foci
- vertices
- co-vertices
- directrix
- latus rectum
- axis of symmetry
- paraboloid of revolution
- major and minor axis
- transverse axis

Conic Sections

Enduring Understandings:

- Conic sections are used in a variety of construction and scientific applications such as bridge design, planetary and satellite orbits, mirrors, navigation and arches.
- The angle or direction you cut through a cone determines the type of conic you will get.
- Certain key points and axes are vital to graphing and using the conic sections to solve real world problems.

Essential Questions:

- How can the understanding of conic sections make more sense of the constructions and designs in our world?
- What determines the type of conic section you will be using?
- Why are there key vital coordinates, points and axes and how do they help me use and apply the conic section to solve problems?