The Planets Project

Parabolas: $y - k = a(x - h)^2$

$x - h = a(y - k)^2$

Circle: $(x - h)^2 + (y - k)^2 = r^2$

Ellipse: $\dfrac{(x - h)^2}{a^2} + \dfrac{(y - k)^2}{b^2} = 1$

Hyperbola: $\dfrac{(x - h)^2}{a^2} - \dfrac{(y - k)^2}{b^2} = 1$

Determine the conic section equations for your planet!

During this project you will create a poster that will explain the conic section:

(1) equation for your planet's orbit,

(2) of a probe that has used a gravity assist around your planet,

(3) the parabolic dish used to receive transmission from home that is on the probe. You must also provide (4) the conic section equations for the sections you draw on your poster as well as (5) compare and contrast the conic sections of the orbit of your planet to that of Halley's Comet.