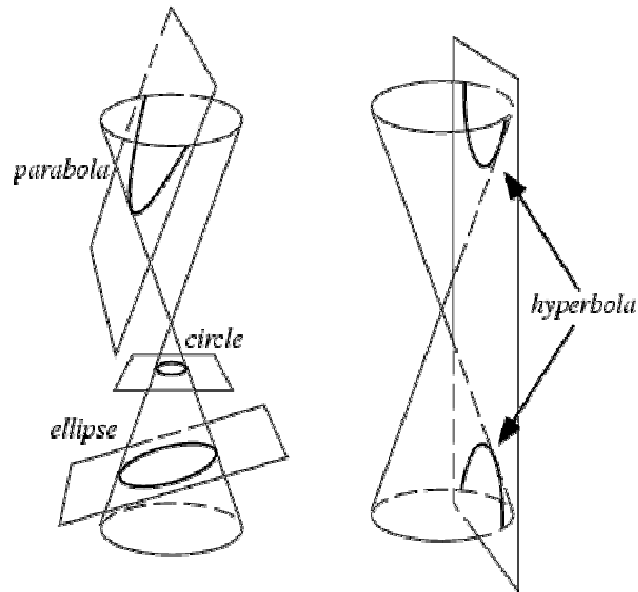


Conic Sections

All conic sections can be formed from the intersection of a plane with a pair of inverted cones.



The general form of a conic section is $Ax^2 + By^2 + Cx + Dy + E = 0$ where A and B are not both zero.

Circles ($A = B$)

$$Ax^2 + By^2 + \dots$$

Ellipses ($A \neq B$)

$$Ax^2 + By^2 + \dots$$

Hyperbolas (B is negative)

$$Ax^2 - By^2 + \dots$$

Parabolas (A or $B = 0$)

$$y = Ax^2 + \dots \quad x = By^2 + \dots$$