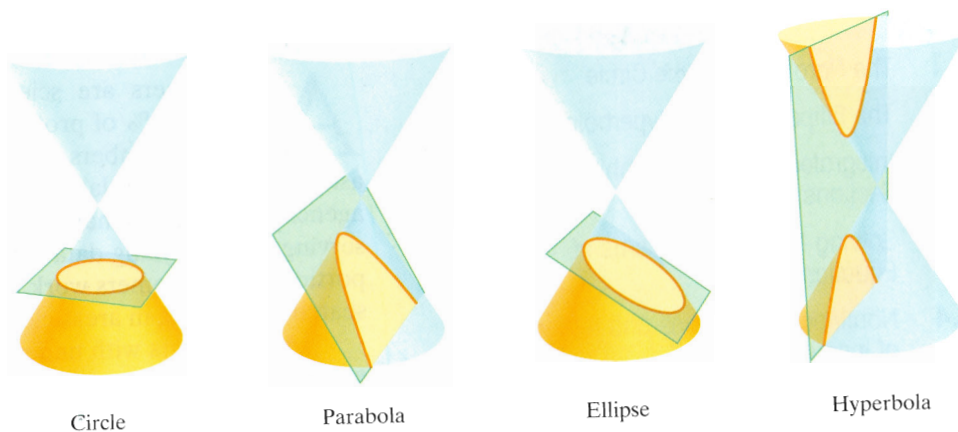# CONIC SECTION OVERVIEW

A **CONIC SECTION** (OR JUST A CONIC) IS FORMED BY "APPROPRIATELY" INTERSECTING A **PLANE** AND A **DOUBLE-NAPPED CONE**.

THE FOUR BASIC CONICS ARE THE **CIRCLE**, **PARABOLA**, **ELLIPSE**, AND THE **HYPERBOLA**, AS SHOWN BELOW.

| Circle | Parabola | Ellipse | Hyperbola |

IF THE PLANE PASSES THROUGH THE VERTEX OF THE CONES IN SUCH A WAY, A **DEGENERATE CONIC** IS FORMED, AS SHOWN BELOW. THE THREE DEGENERATE CONICS ARE THE **POINT**, THE **LINE**, AND **TWO INTERSECTING LINES**.

Point   Line   Two Intersecting Lines

Degenerate Conics