Thought Process for Solving Conics Problems

circle	ellipse	hyperbola	parabola
• draw a picture • Is it centered at the origin or translated? • What standard form equation do we use? • What is (h, k)? • If translated what quadrant are we in? • Radius?	• draw a picture • Which axis is the major axis? • Minor axis? • What is *a*? • What is *b*? • What is *c*? • What is the equation we use to relate *a, b, and c*? • What are the foci? *Remember it is a point, an ordered pair.*	• draw a picture • Locate the vertices and foci on the graph. • What is *a*? • What is *b*? *Do we need to figure out c first?* • What is *c*? • What is the equation we use to relate *a, b, and c*? • How do we find the asymptotes? • What is the relation between <u>a</u> and <u>b</u> and the asymptotes? • Which is the rise? • Run?	• draw a picture • Where is the vertex? • Where are the focus and directirx? • So how is the parabola oriented? *Remember, the parabola cups the focus!* • What is the standard form we use? • What is the equation we use to relate our leading coefficient with <u>c</u>?