

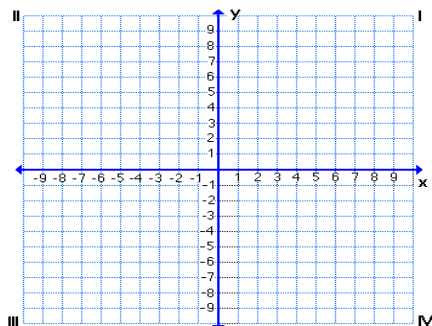
Name \_\_\_\_\_

**Honors Precalc  
9.1-9.3 Review/Conic Sections**

**Identify the equation as a circle, parabola, ellipse or hyperbola, then find the equation in standard form, then graph the equation (Be sure to label the Center, vertices, foci, directrix and Slant asymptotes).**

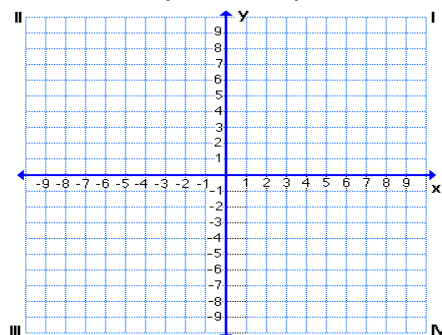
1.  $9x^2 - 16y^2 - 18x - 32y - 151 = 0$

**Circle   parabola   ellipse   hyperbola  
(circle one)**



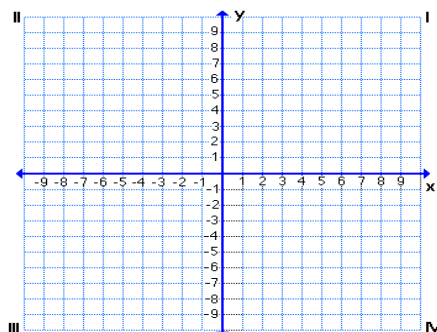
2.  $16x^2 + 9y^2 - 32x + 72y + 16 = 0$

**Circle   parabola   ellipse   hyperbola  
(circle one)**



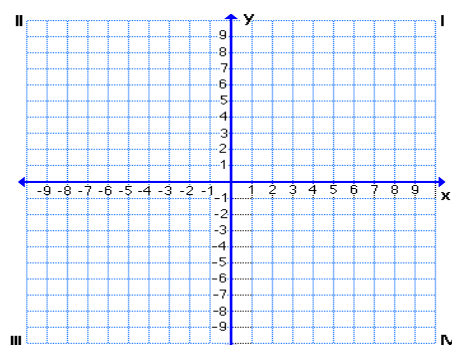
3.  $18x + \frac{1}{2}y^2 = 0$

**Circle   parabola   ellipse   hyperbola  
(circle one)**

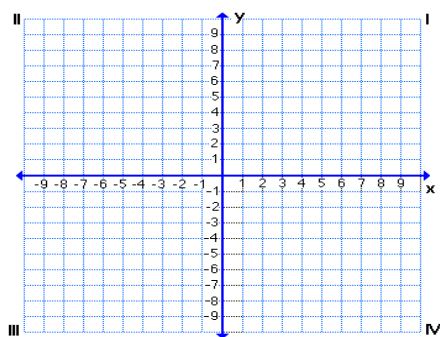


4.  $16x^2 + 16y^2 - 16x + 24y - 3 = 0$

**Circle   parabola   ellipse   hyperbola  
(circle one)**



5.  $\frac{x^2}{32} - \frac{y^2}{32} = 1$



6. Find the standard form of the parabola with a vertex (4,2) and focus (4,0).

7. Find the standard form of the ellipse with a vertices (5,0), (-5,0) and foci (4,0), (-4,0).

8. Find the standard form of the hyperbola with a vertices (0,1), (0,-1) and foci (0,3), (0,-3).

9. A parabolic archway is 12 meters high at the vertex. At a height of 10 meters, the width of the archway is 8 meters. How wide is the archway at the ground? Exact please!