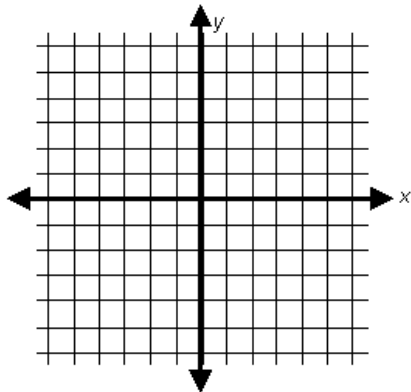


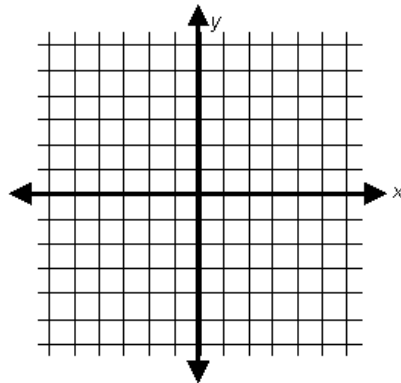
Conics Worksheet (Circles, Parabolas, Hyperbolas, and Ellipses)

Graph the conic. Identify the important characteristics.

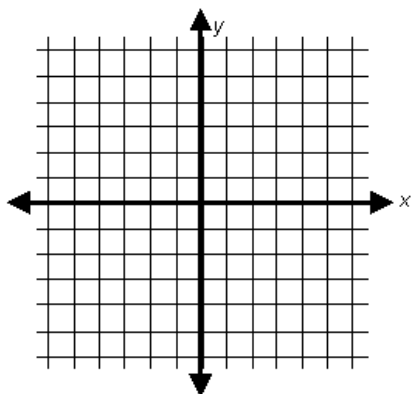
1. $(y-1)^2 = -12x$



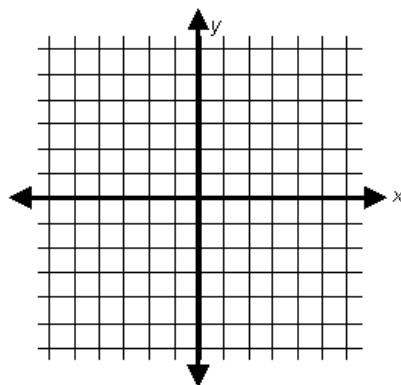
2. $\frac{(y+2)^2}{4} - \frac{(x-3)^2}{12} = 1$



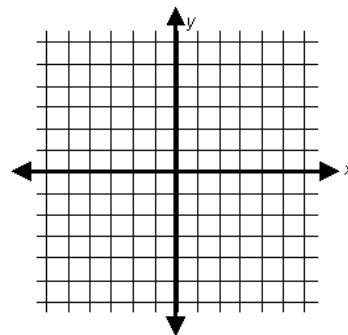
3. $(x+2)^2 + y^2 = 13$



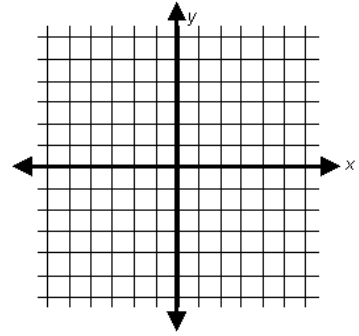
4. $\frac{(x+1)^2}{3} + \frac{(y-2)^2}{9} = 1$



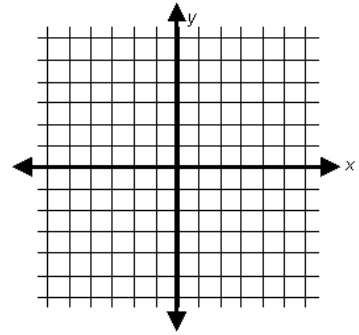
5. Parabola with focus at $(-3, 2)$ and directrix at $x = 5$.



6. Hyperbola with vertices $(-1, 1)$ and $(5, 1)$ and foci $(-2, 1)$ and $(6, 1)$.



7. Ellipse with foci $(-1, -4)$, $(-1, 2)$ and minor axis of length 8.



Identify the conic, write the equation of the conic in standard form and graph.

8. $-2x^2 + 4y^2 - 4x - 16y + 78 = 0$ 9. $3x^2 + 2y^2 - 12x - 4y - 10 = 0$

