Determine if each algebraic equation represents a circle, ellipse, hyperbola or parabola.

 If the equation represents a circle

* Determine the coordinates of the center
* Determine the length of the radius

If the equation represents an ellipse

* Determine the coordinates of the center, foci, vertices and co-vertices
* Determine equations for the major and minor axes

If the equation represents a hyperbola

* Determine the coordinates of the center, foci, vertices, and co-vertices
* Determine equations for the asymptotes, transverse axis and conjugate axis

If the equation represents a parabola

* Determine the coordinates of the vertex and focus
* Determine equations for the line of symmetry and directrix

1. $y= \frac{1}{4}(x-2)^{2}$ 2. $\frac{(x-2)^{2}}{64}- \frac{(y+2)^{2}}{49}=1$ 3. $(x-3)^{2}+(y+2)^{2}=36$

 

4. $\frac{(y+1)^{2}}{100}+ \frac{(x+3)^{2}}{36}=1$



5. $\frac{(y+1)^{2}}{64}+ \frac{(x+3)^{2}}{4}=1$



6. $(x-5)^{2}+y^{2}=81$

