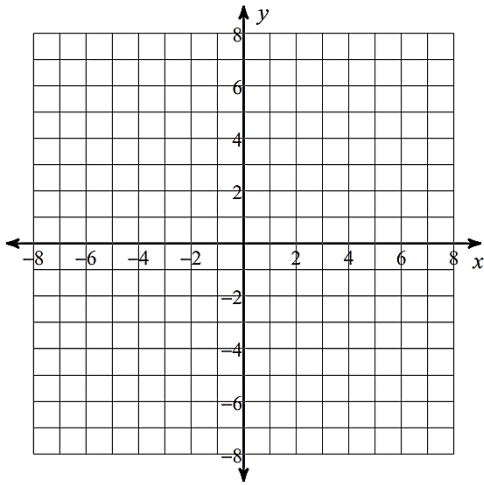


Graph each conic.

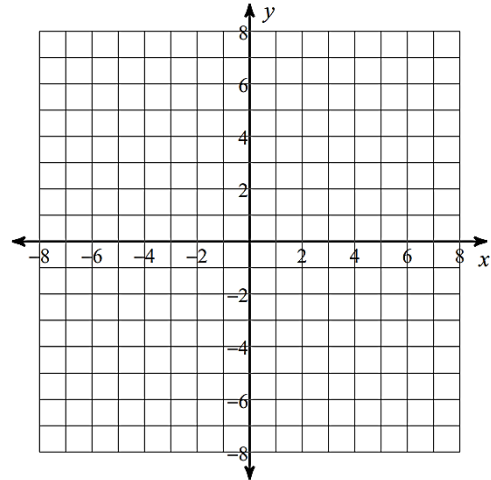
1.  $(x + 2)^2 + (y - 1)^2 = 9$



Center:

Vertices:

2.  $\frac{(x+3)^2}{16} + \frac{(y-1)^2}{4} = 1$

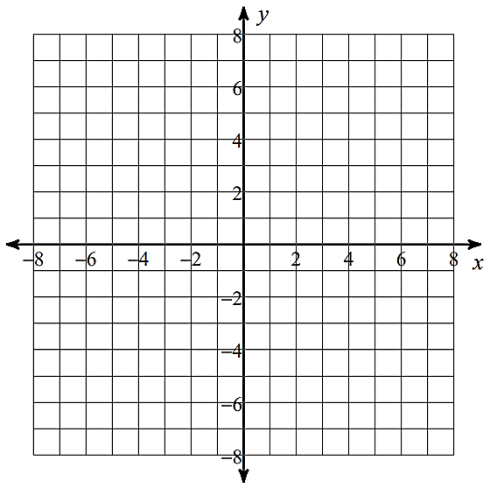


Center:

Vertices:

Foci:

3.  $\frac{y^2}{25} - \frac{(x+4)^2}{9} = 1$

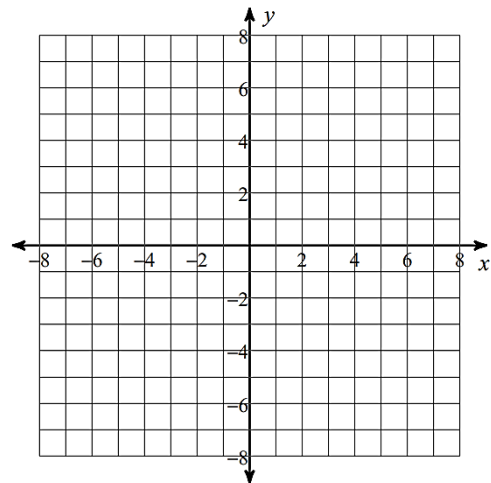


Center:

Vertices:

Foci:

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

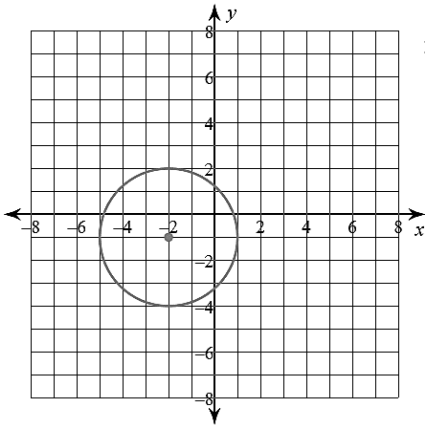


Vertex:

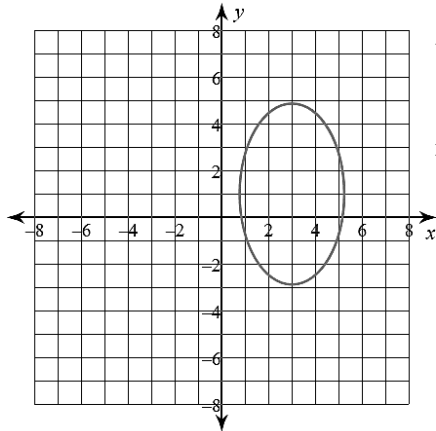
Foci:

Write the standard equation for each.

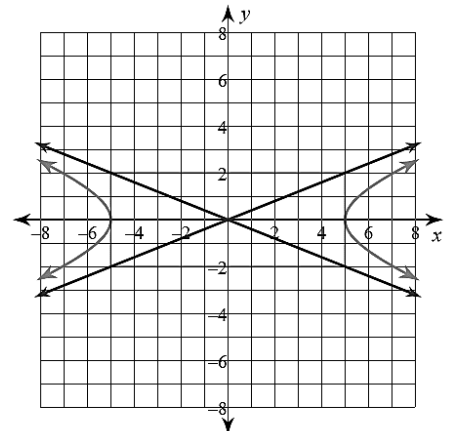
5.



6.



7.



Write the equation in standard form and classify the conic.

8.  $4x^2 + y^2 - 8x + 6y + 9 = 0$

9.  $x^2 - 4y^2 + 6x - 8y = 11$

10. The main cables of a suspension bridge are 90 feet above the road at the towers and 10 feet above the road at the center. The road is 600 feet long. The main cables hang in the shape of a parabola. Find the equation of the parabola. Then determine how high the main cable is 150 feet away from the center.

