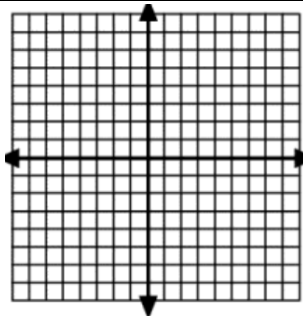


Algebra 2
9.5 Homework

Name: _____

Identify the center, vertices, co-vertices, and focus points of each ellipse. Then graph each ellipse.

1. $\frac{x^2}{4} - \frac{y^2}{16} = 1$



Vertices: _____

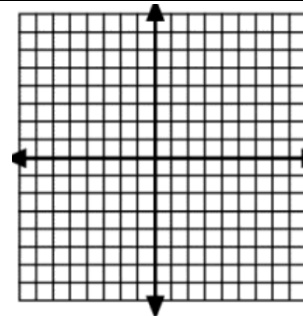
Co-vertices: _____

Asymptotes: _____

Transverse Axis length: _____

Conjugate Axis Length: _____

2. $\frac{y^2}{16} - \frac{x^2}{9} = 1$



Vertices: _____

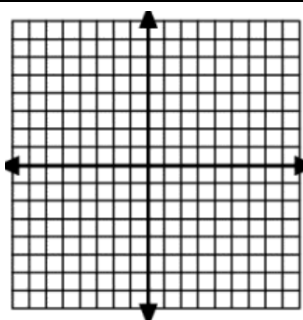
Co-vertices: _____

Asymptotes: _____

Transverse Axis length: _____

Conjugate Axis Length: _____

3. $\frac{x^2}{9} - \frac{y^2}{36} = 1$



Vertices: _____

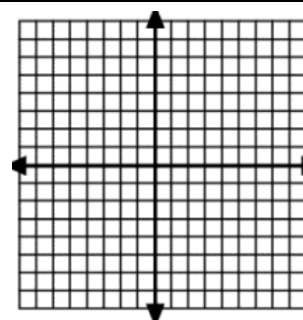
Co-vertices: _____

Asymptotes: _____

Transverse Axis length: _____

Conjugate Axis Length: _____

4. $\frac{y^2}{49} - \frac{x^2}{9} = 1$



Vertices: _____

Co-vertices: _____

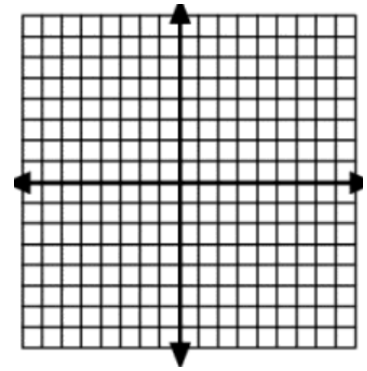
Asymptotes: _____

Transverse Axis length: _____

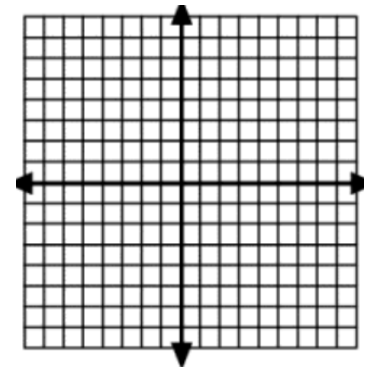
Conjugate Axis Length: _____

Write an equation that satisfies the each set of conditions. Graph the hyperbola.

5. vertices $(-4, 0)$ and $(4, 0)$, conjugate axis of length 6



7. vertices $(0, 6)$ and $(0, -6)$, conjugate axis of length 14



8. Vertices $(0, 7)$ and $(0, -7)$, conjugate axis of length 18 units

