Compute the coordinates of the foci for each ellipse.

1. $\frac{x^{2}}{25}+ \frac{y^{2}}{9}=1$ 2. $\frac{x^{2}}{4}+ \frac{y^{2}}{49}=1$ 3. $\frac{x^{2}}{100}+ \frac{y^{2}}{225}=1$

Identify the coordinates of the center, foci, vertices, and co-vertices and identify equations for the major and minor axes for each ellipse. Then sketch a graph of each ellipse.

4. $\frac{x^{2}}{81}+ \frac{(y-3)^{2}}{9}=1$ 5. $\frac{(y+2)^{2}}{49}+ \frac{(x-1)^{2}}{16}=1$

 

Write an algebraic equation for each ellipse defined by the given information. Then sketch a graph of each ellipse.

6. Vertices at (-4, 1) and (8, 1); Foci at (-1, 1) and (5, 1)



7. Foci at (1, -2) and (1,0); Co-vertices at (-1,-1) and (3,-1)

