

For 1 and 2, state the coordinates of the Center, Vertices, Co-Vertices, and Foci.

1.  $\frac{(x-9)^2}{289} + \frac{(y-4)^2}{225} = 1$

2.  $\frac{(x+3)^2}{81} + \frac{(y+1)^2}{169} = 1$

Center: \_\_\_\_\_

Center: \_\_\_\_\_

Vertices: \_\_\_\_\_

Vertices: \_\_\_\_\_

Co-Vertices: \_\_\_\_\_

Co-Vertices: \_\_\_\_\_

Foci: \_\_\_\_\_

Foci: \_\_\_\_\_

3. The Center of an ellipse is  $(-1, 4)$  a Co-Vertex is  $(4, 4)$  and the Major Axis is 14 units long.  
Write the equation of this ellipse.

EQ: \_\_\_\_\_

4. The Vertices are  $(-1, -2)$  and  $(15, -2)$  and the minor axis is 6 units long.  
Write the equation of this ellipse.

EQ: \_\_\_\_\_

5. A Vertex of an ellipse is  $(6, 8)$  and the Foci are  $(6, 4)$  &  $(6, -2)$ . Write the equation of this ellipse.

EQ: \_\_\_\_\_