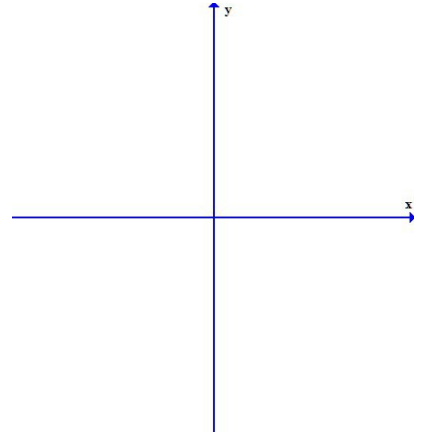


7.3 Practice Problems

1. For the equation of an ellipse find the following. $\frac{(x+1)^2}{16} + \frac{(y-2)^2}{9} = 1$

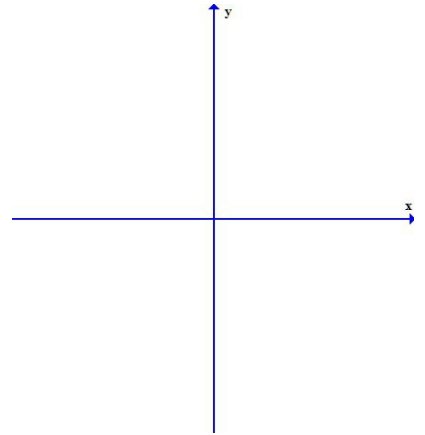
- the center of the ellipse.
- the vertices of the ellipse.
- the foci of the ellipse.
- graph the equation.



2. For the equation of an ellipse find the following.

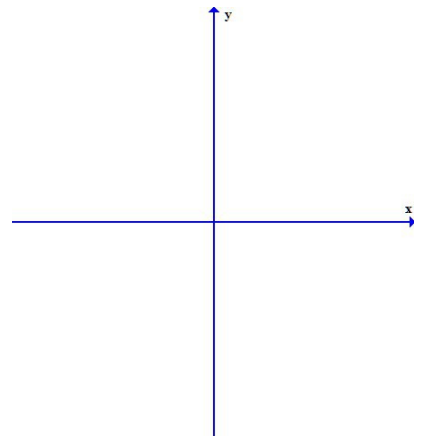
$$4x^2 + 9y^2 - 24x + 18y + 9 = 0$$

- rewrite the equation of the ellipse using completing the square.
- the center of the ellipse.
- the vertices of the ellipse.
- the foci of the ellipse.
- graph the equation.



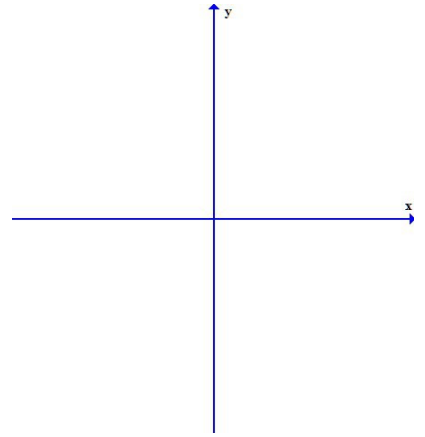
3. Find an equation of the ellipse. Graph the equation.

Foci at $(\pm 4, 0)$; the length of the major axis is 10.



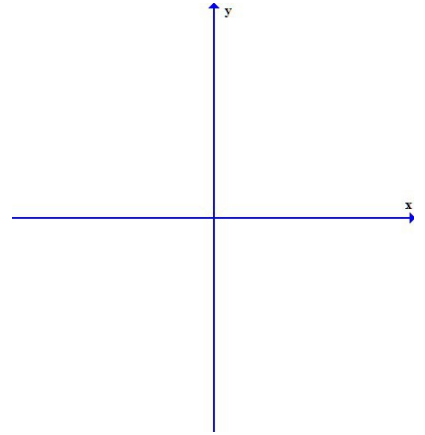
4. Find an equation of the ellipse. Graph the equation.

Center at $(1, -4)$; vertex at $(1, -1)$; focus at $(1, -6)$;

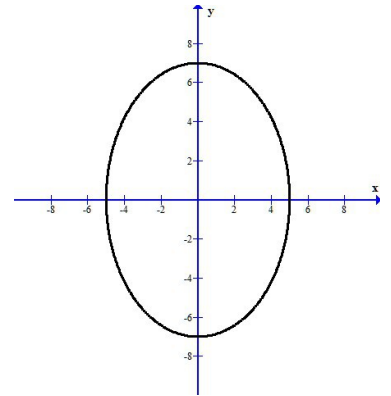


5. Find an equation of the ellipse. Graph the equation.

Vertices at $(0, 3)$ and $(8, 3)$; focus at $(6, 3)$;



6. Write an equation for the ellipse.



7. Write an equation for the ellipse.

