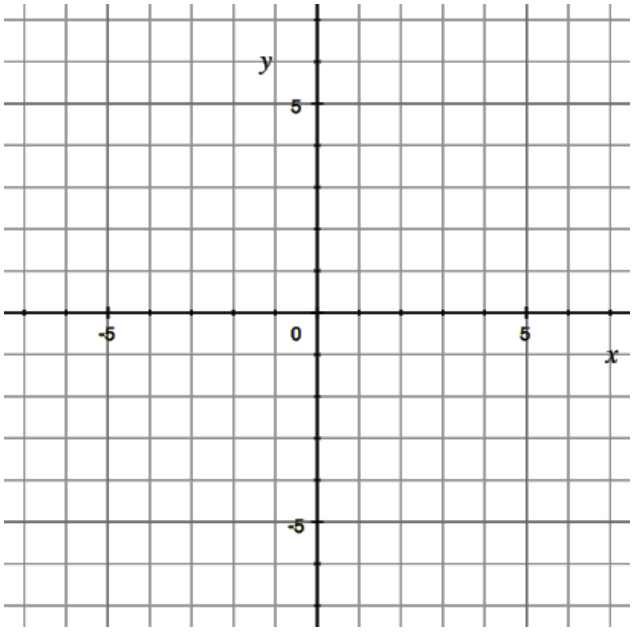
Number: Textbook Section:
Title:

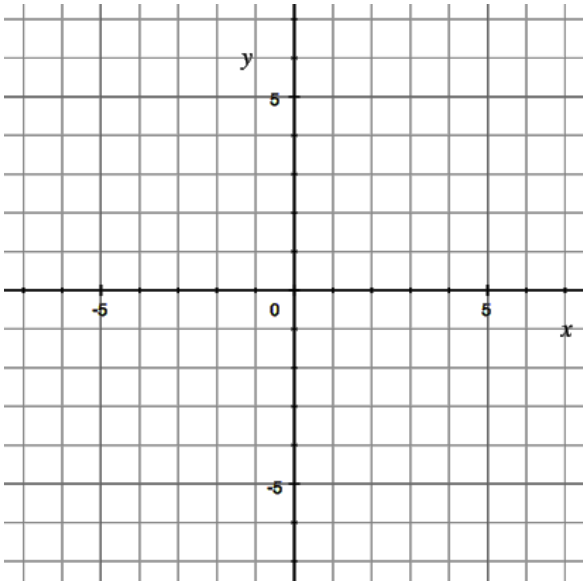
Recall:

Consider $4x^2 + 9y^2 = 36$

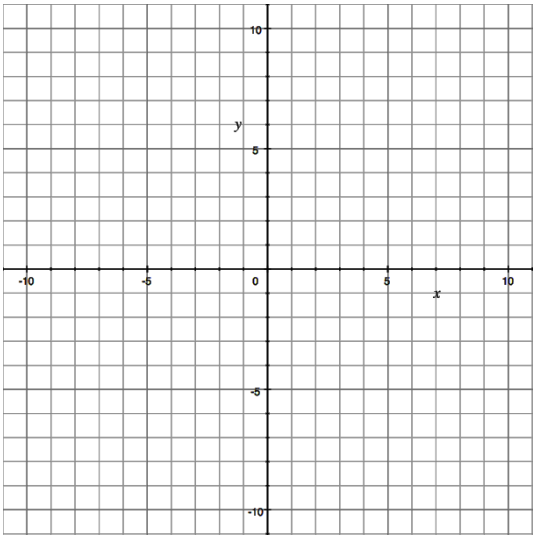


Equations:

1. Analyze and graph $\frac{(x+2)^2}{25}+\frac{(y-4)^2}{4}=1.$

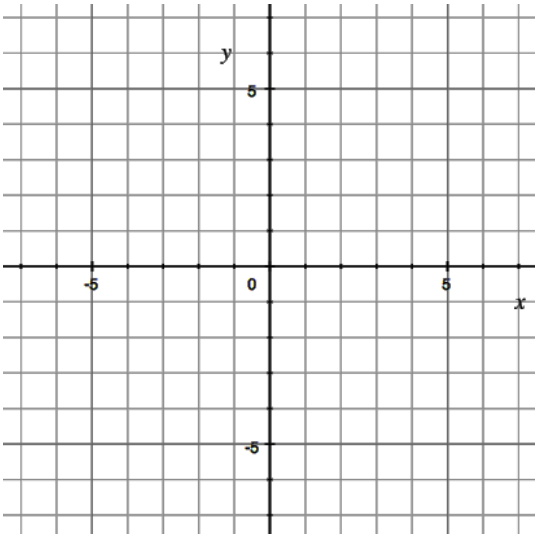


2. Analyze and graph $\frac{(x+2)^2}{4}+\frac{(y-4)^2}{25}=1.$



3. Find the equation of the ellipse with *x*-intercepts $(-4,\ 0)$ and $(4,\ 0)$ and with foci $(-3,\ 0)$ and $(3,\ 0)$.

4. Sketch the graph of the ellipse given by $9x^2 - 18x + 4y^2 + 16y = 11$. Give the center, foci, and vertices.



5. Find the equation of the ellipse with center at $(1,\ 2)$, focus at $(2,\ 4)$, and which contains the point $(2,\ 2)$.

Eccentricity: