

11.4 Corrective Assignment – Ellipses

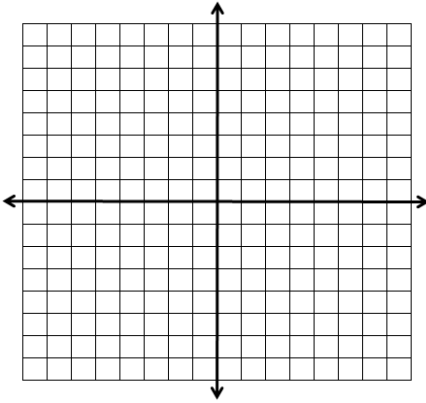
Algebra 2

Name: _____ ID: 1

Date: _____ Period: _____

In problems 1-4, Sketch the graph of the given equation and fill in the blanks for the given information.

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



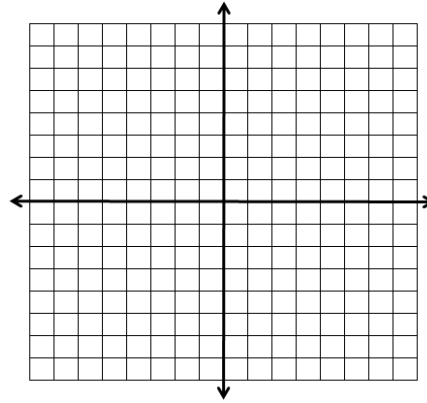
Center:

Vertices:

Co-vertices:

Foci:

2. $9x^2 + 49(y - 1)^2 = 441$



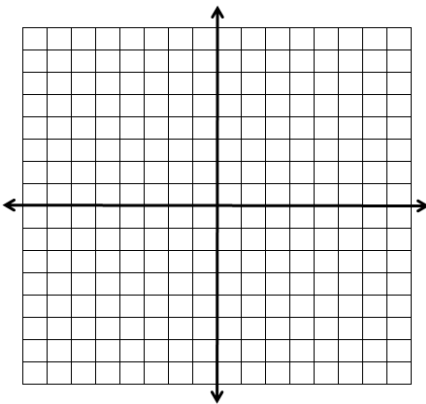
Center:

Vertices:

Co-vertices

Foci:

3. $36(x - 1)^2 + (y + 1)^2 = 36$



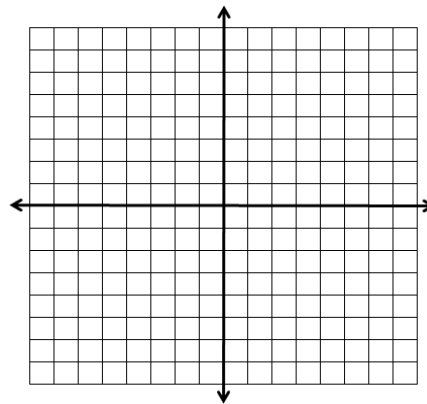
Center:

Vertices:

Co-vertices:

Foci:

4. $9(x + 1)^2 + 25(y + 1)^2 = 225$



Center:

Vertices:

Co-vertices

Foci:

Use the information provided to write the standard form equation of each ellipse.

5) Vertices: $(5, 18), (5, -2)$
Co-vertices: $(9, 8), (1, 8)$

6) Vertices: $(17, -4), (-5, -4)$
Co-vertices: $(6, 2), (6, -10)$

7) Vertices: $(-7, 5), (-7, -25)$
Co-vertices: $(-3, -10), (-11, -10)$

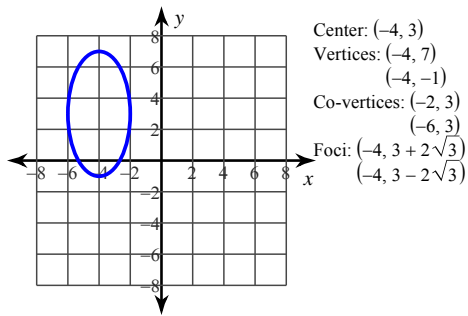
8) Vertices: $(13, -6), (-1, -6)$
Co-vertices: $(6, 0), (6, -12)$

9) Vertices: $(8, -2), (-18, -2)$
Foci: $(0, -2), (-10, -2)$

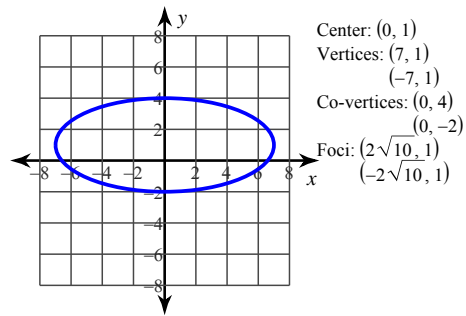
10) Vertices: $(12, -3), (-14, -3)$
Foci: $(4, -3), (-6, -3)$

Answers to 11.4 Corrective Assignment - Ellipses (ID: 1)

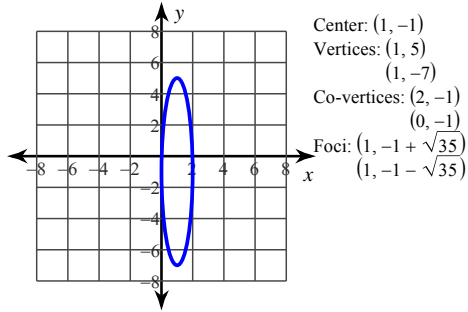
1)



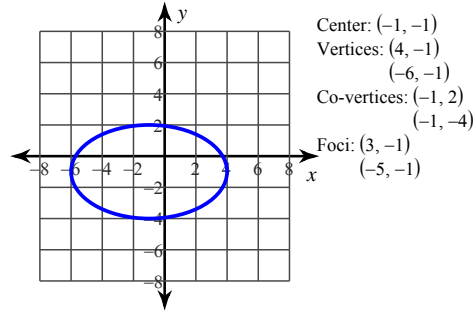
2)



3)



4)



$$5) \frac{(x-5)^2}{16} + \frac{(y-8)^2}{100} = 1$$

$$6) \frac{(x-6)^2}{121} + \frac{(y+4)^2}{36} = 1$$

$$7) \frac{(x+7)^2}{16} + \frac{(y+10)^2}{225} = 1$$

$$8) \frac{(x-6)^2}{49} + \frac{(y+6)^2}{36} = 1$$

$$9) \frac{(x+5)^2}{169} + \frac{(y+2)^2}{144} = 1$$

$$10) \frac{(x+1)^2}{169} + \frac{(y+3)^2}{144} = 1$$