

Name: _____

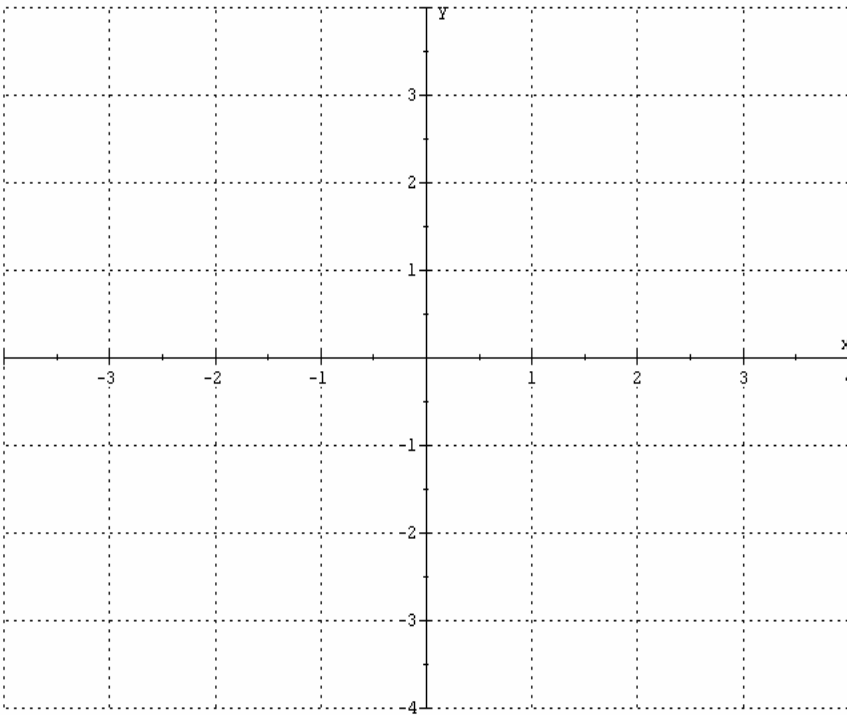
Show all work for full credit.

Ch. 9, 10, 11

11/06/13 *Take Home Exam #3 – Math 260*

Box your final answers.

1.) Given: $(y - 1)^2 = -8x$, determine the Focus, directrix then graph.



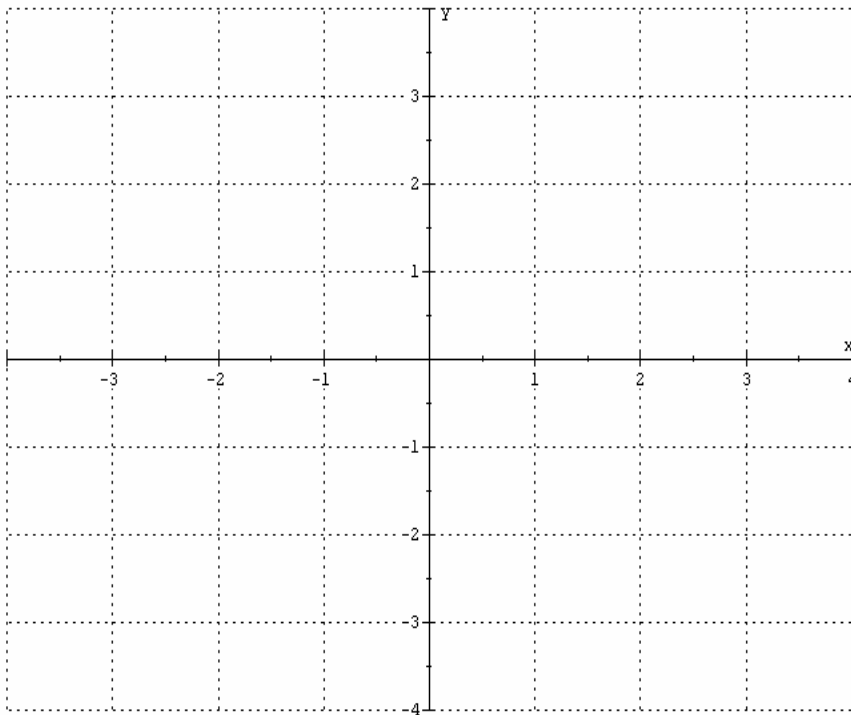
2.) Find the equation of the ellipse with foci $(0, \pm 8)$ and eccentricity $E = \frac{4}{5}$.

3.) Write the equation of the hyperbola if it is centered at $(9, -7)$, a focus at $(9, 3)$ and a vertex at $(9, -1)$.

4.) Graph the equation $\frac{x}{3} = \sqrt{1 - \frac{y^2}{25}}$. Give the domain and range.

Domain:

Range:



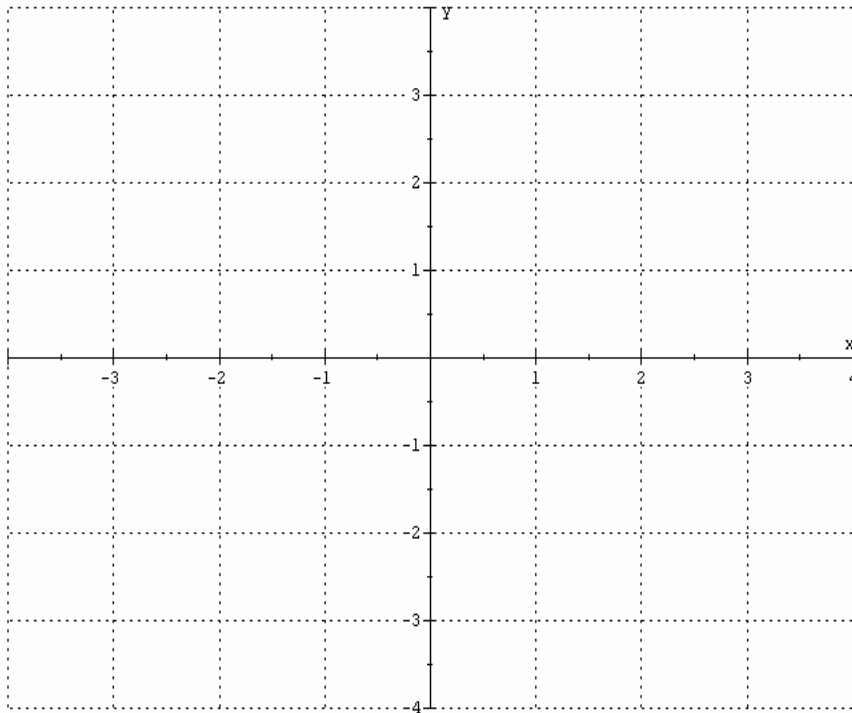
5.) Graph the equation $x + 1 = -\frac{1}{4}(y - 2)^2$. First write it in its standard form, then find:

Vertex:

Focus:

Directrix:

X-intercept and y-intercept, if any.



6.) Find the standard equation of the hyperbola having vertices at (3, - 5) and (3, 1) and having asymptotes $y = 2x - 8$ and $y = -2x + 4$.

7.) Determine the foci of the ellipse with equation $2x^2 + 4y^2 - 4x + 12y = 0$

8.) Determine the Foci of the hyperbola $x^2 - 9y^2 + 2x - 54y - 80 = 0$

9.) Write the equation of the parabola with vertex of (3, 1) and x-intercept of (4, 0).

10.)