Name: _____

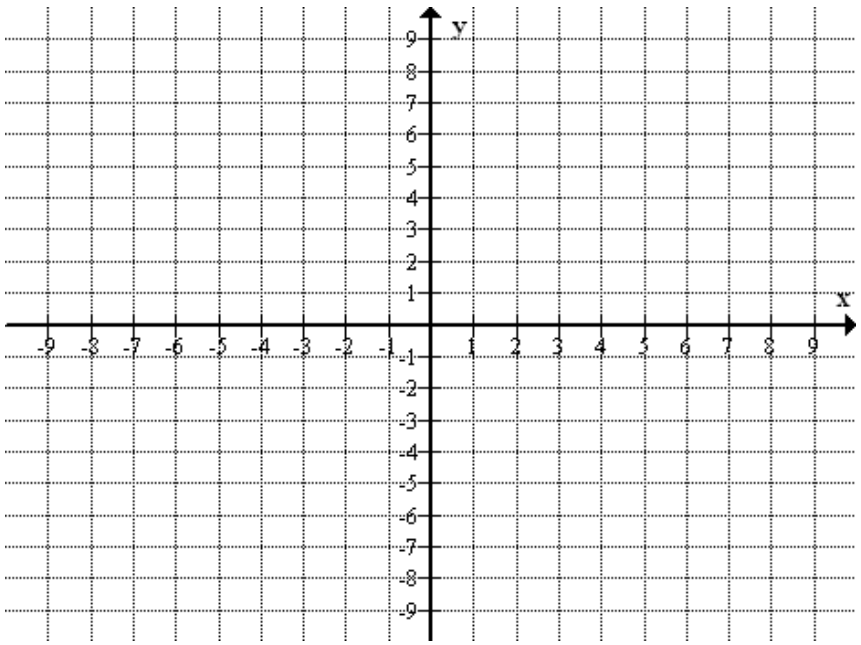
Offline HW 9

This offline assignment is **due Monday, 4/2**. No extensions will be given.

The overall look of your paper will count toward your grade. Please graph the conic on the grid provided below. **Submissions on other paper will not be graded**.

This must be **YOUR work**; you are not allowed to ask tutors, friends or family members for help. You CAN however consult with your classmates. If you choose to do so, each of you must submit a separate paper and the name of the person(s) with whom you collaborated must be written on this paper. The papers that are **suspiciously identical will receive 0 credit**.

1.Write the equation, in the standard form, of the parabola with the focus at (4,2) and the directrix y = -2. Graph the parabola and the directrix. Plot and label the vertex and the focus. DO NOT PLOT POINTS OTHER THAN FOCUS,VERTEX, THE ENDPOINTS OF LATUS RECTUM.



2. Write the equation of a parabola in the standard form. Find the coordinates of the vertex , focus and the endpoints of the latus rectum segment; plot and label them on the graph. Write the equation of the directrix. Graph the parabola. DO NOT PLOT POINTS OTHER THAN FOCUS,VERTEX, THE ENDPOINTS OF LATUS RECTUM.

$y^2 + 8x - 2y + 9 = 0$