## Offline HW 8

This assignment is due on Monday, November 13. No extensions will be given. SHOW COMPLETE WORK. NO WORK, NO CREDIT.

1. Write the equation in the standard form of the hyperbola with the center at $(-2,1)$, focus at $(-2,6)$, and vertex at $(-2,4)$. Find the coordinates of the other vertex and the other focus. Graph the hyperbola.

2. Write the equation in the standard form. Find the coordinates of the center, vertices, foci, and graph the equation.

$$
9 x^{2}-4 y^{2}-18 x+24 y-63=0
$$



