Activity 1 of Lesson 6: The Usefulness of the Vertex form of a Parabola

Parabola: $y = 1/8 (x + 3)^2 - 4$

Vertex Form

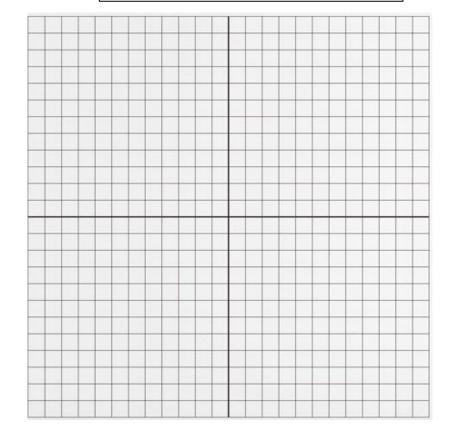
$$y = \frac{(x-h)^2}{4p} + k$$

1. What is the vertex?

2. The line of symmetry?

3. The distance between the focus and the vertex (p)?

4. Coordinate pair for the focus?



5. Equation for the directrix?

6. What else do you need to know to graph the parabola? Find that information: