

Precalculus: Parabolas with Desmos

1. While looking at the graph, use the sliders to move h , k , and p . Notice how each of these variables affect the graph. Describe the effect of each of these below.

h :

k :

p :

2. From your work above, in particular, what makes the graph flip so that the opening is down?

3. What does the point (h, k) represent?

4. What is the relationship between the focus, the vertex, and the directrix?