General equation for a parabola with a vertex at the origin: $y = \frac{x^2}{4p}$

What effect does the value of p have on the graph of the equation of $y = \frac{x^2}{4p}$?. Below are the graphs of parabola p values of ¼ and ½ .

1. What do you notice about the two graphs?

2. What do you notice about the points on the two graphs that have the same y- values?

3. What do you notice about the "special points" on the parabola? These are the points that are lined up horizontally with the focus for each parabola.