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

Below are the graphs of parabolas for the *p*-values of $\frac{1}{4}$, $\frac{1}{2}$, and 1 .

1. In the graph below, the labeled points on the parabolas all have the same x-value. Comparing these points, what do you notice about how the *x*-values change as the *p*-value increases?

2. Using the labels points on the parabola in your argument, justify your claim about how the *x*-values change as the *p*-value increases.