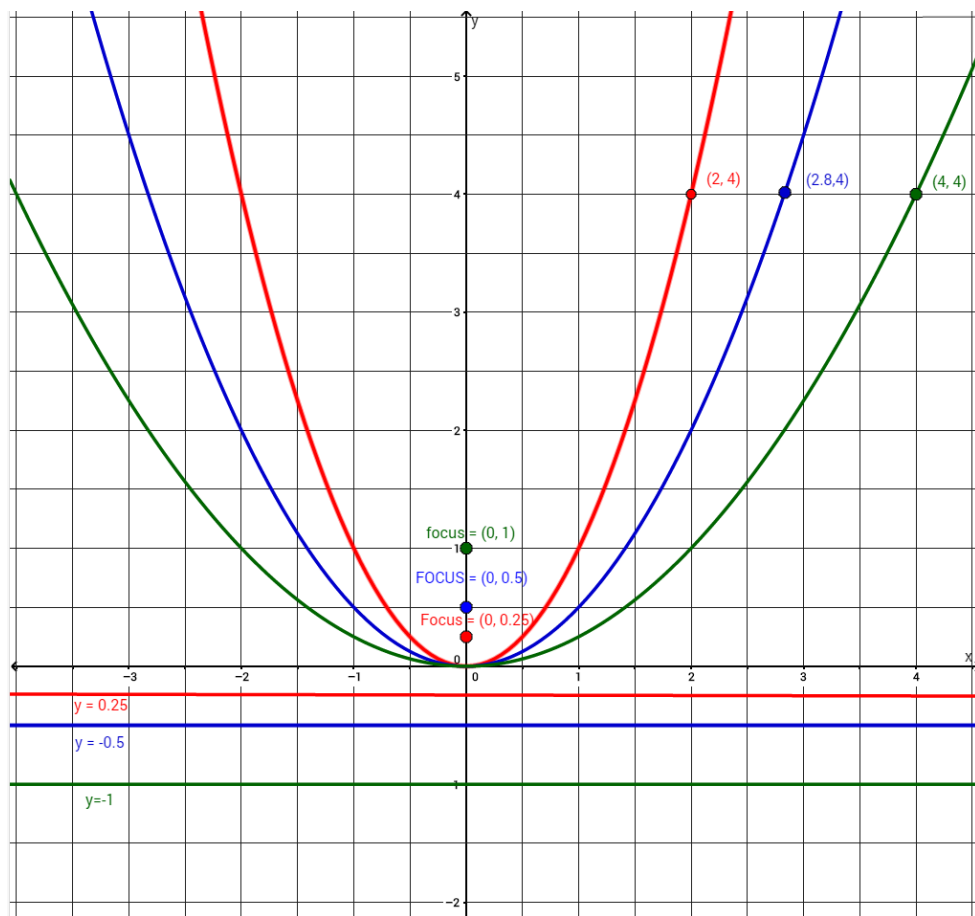


$$\text{General equation for a parabola with a vertex at the origin: } y = \frac{x^2}{4p}$$

Below are the graphs of parabola 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 y -value. Comparing these points, what do you notice about how the x -values change as the p -value increases?
2. What does it mean for one parabola to be wider than another parabola? How would you provide mathematical evidence for that claim?



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