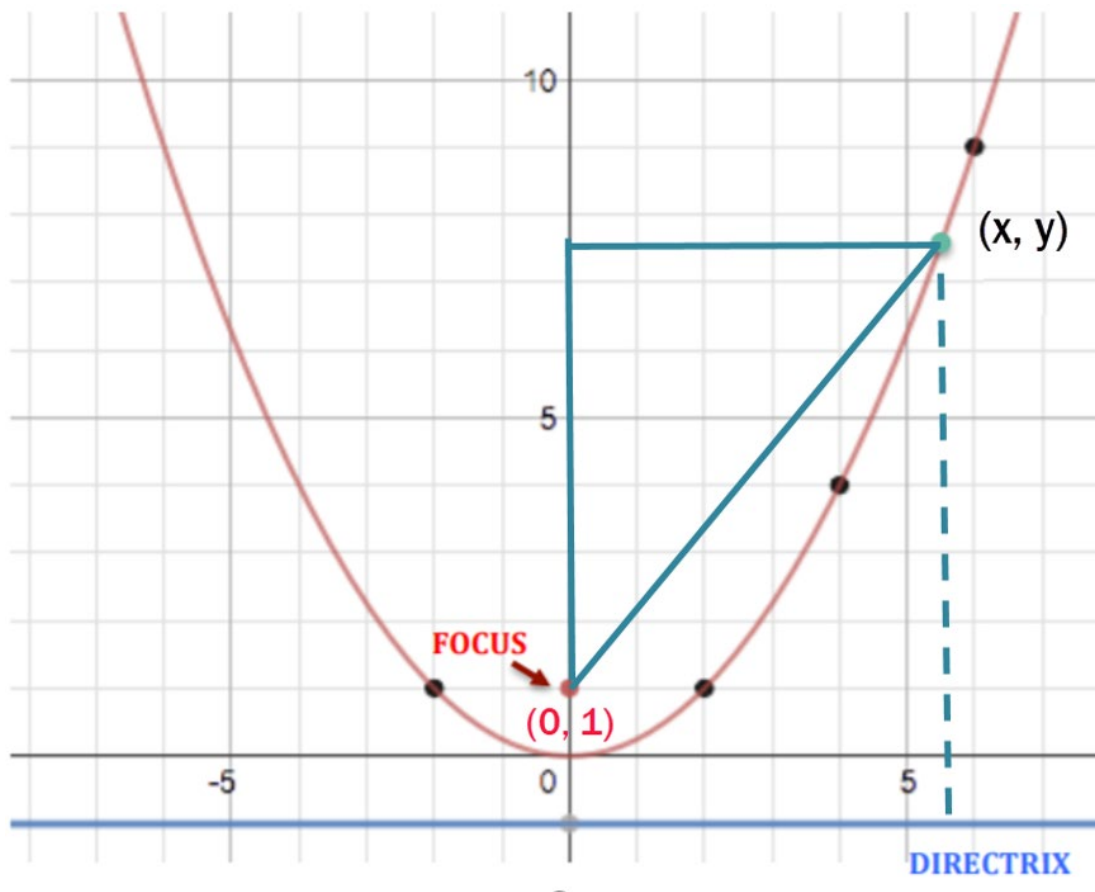**Activity 3 of Lesson 3:**
Derive the Equation for a Parabola

Task: Generalize Sasha and Keoni's method to find the equation for this parabola with a focus at (0, 1)

Derive the equation for this parabola following Sasha & Keoni's general approach:

a. What is the distance from the general point (x,y) to the directrix and **why**?

b. What is the length of each side of the right triangle and **why**?

c. Use algebra to find the equation (in a simple form)