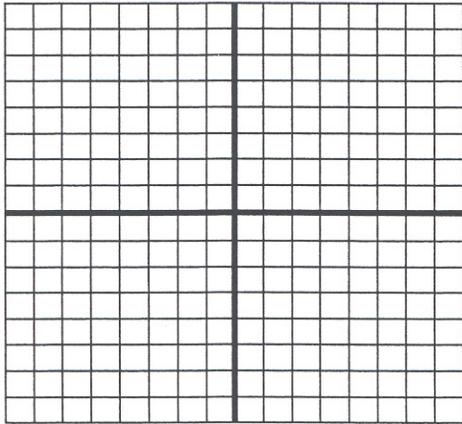


Activity 3: Investigating the Role of h

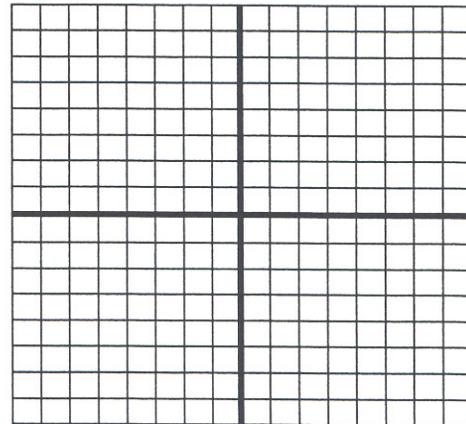
Sketch a graph of the following using a graphing calculator. Your observations should include some table values.

1. $y = x^2$, $y = (x + 2)^2$, $y = (x + 1)^2$ 2. $y = (x - 1)^2$, $y = \left(x - \frac{1}{2}\right)^2$

Observations:

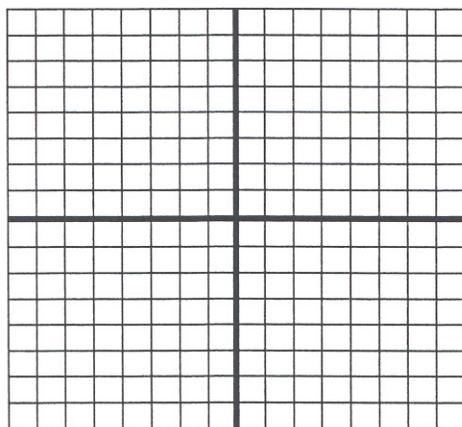


Observations:



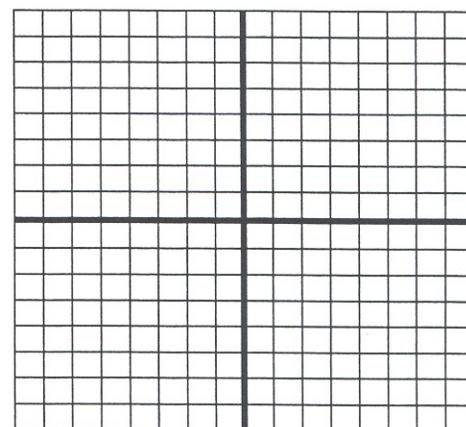
3. $y = (x - 3)^2$, $y = (x + 2)^2$

Observations:



4. $y = (x + 22)^2$, $y = (x - 15)^2$

Observations:



5. In general, what is the effect on the graph of $y = x^2$, when you replace x with $(x + h)$?