Names: _____

Quadratics Exploration:

1. Graph $y=x^2$ (this is the parent function)

2. Graph a quadratic function that has a y-intercept that is higher than the parent function

   Function 1: _____

   What changed between the parent function's equation and function 1?

3. Graph a quadratic function that is a reflection of the parent function

   Function 2: _____

   What changed between the parent function's equation and function 2?

4. Graph a quadratic function that is wider than the parent function

   Function 3: _____

   What changed between the parent function's equation and function 3?

5. Graph a quadratic function that is thinner than the parent function

   Function 4: _____

   What changed between the parent function's equation and function 4?

6. Graph a quadratic function that slides to the left of the parent function

   Function 5: _____

   What changed between the parent function's equation and function 5?