Analyzing the Effects of the Changes in "a" on the Graph $y = ax^2 + c$

Name:

Date:

Vocabulary Review:
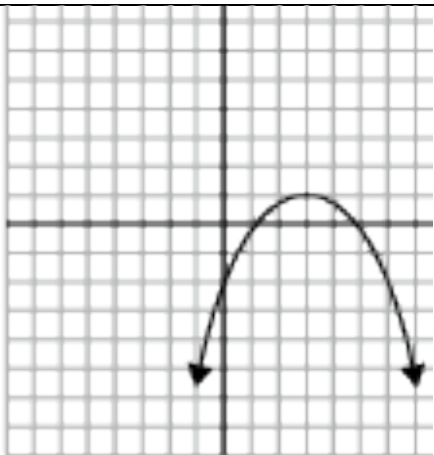In your own words, define each of the following vocabulary terms.

- Quadratic Equation

- Parabola

Apply New Learning:

1. Describe how changing the "a" value in $y = ax^2 + c$ to a value that is less than 1 affects its graph.

2. Describe how changing the "a" value in $y = ax^2 + c$ to a value that is in between 0 and 1 affects its graph.

3. Describe how changing the "a" value in $y = ax^2 + c$ to a value that is less than 1 affects its graph.

Compare the two graphs below. Describe whether the "a" value in $y = ax^2 + c$ is most likely to be less than 1, between 0 and 1, or more than 1 for each graph. Explain your reasoning. Use the words "narrower," "wider," or "reflection" in your description.

4.		
5.		