

8.1-8.3 Review

Algebra 1H

Name _____

Take home quiz!

Per _____

1) Consider the equation: $f(x) = ax^2 + c$

a. What type of function is this? _____

b. What effect(s) does “a” have on the graph of the function? _____

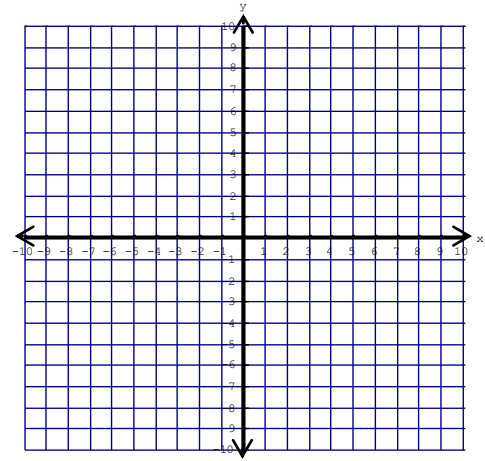
c. What effect does “c” have on the graph of the function? _____

2) A basketball travels through the air towards the hoop, and follows the path given by the equation $y = -2x^2 + 12x + 4$ where x and y are measured in *feet*. At its highest point, how far off the ground is the basketball?

2. _____

3) What is a main difference between an exponential function and quadratic function in terms of their equations? What is the main difference between those two functions in terms of their graph?

4) Graph (create a table of values): $y = -x^2 + 4x + 6$



Vertex: _____

Axis of Symmetry: _____

Domain: _____

Range: _____

5) Tell whether the function has a minimum value or maximum value, then find the value. Find the y-intercept as well.

$$f(x) = -\frac{1}{2}x^2 + 2x + 16$$

Minimum or Maximum _____

Value _____

y-intercept _____