

Quadratics 1a – Introduction to Quadratics

Quadratic Functions $g(x) = ax^2 + c$

Homework #7

- 1) How does the graph of the quadratic function defined by $f(x) = 3x^2$ compare to the graph of the quadratic function defined by $g(x) = 2x^2$?
- 2) Sketch the graph $g(x) = ax^2 + c$ for various values of “a” and “c”. Identify the vertex, domain and range.
 - a) If $a = 2$ and $c = 3$
 - b) If $a = -\frac{1}{2}$ and $c = -3$
 - c) If $a = -3$ and $c = 7$
- 3) Sketch the graph of the given function. Identify the vertex, domain, and range.
 - a) $g(x) = x^2 + 2$
 - b) $k(x) = 2x^2$
 - c) $p(x) = -x^2 + 1$
 - d) $n(x) = \frac{1}{3}x - 2$

(DO in Power Homework Format on graph paper provided!)

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