

Written Homework Section 3.3

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Name: _____

Due: _____

For the given quadratic function: (a) Create a graph by determining whether it opens up or down, and by finding its vertex, axis of symmetry, and intercepts (if any). (b) Determine the Domain and Range of the function. (c) Determine where the function is increasing and where it is decreasing. Verify your results by using a graphing utility.

44. $f(x) = 2x^2 + 5x + 3$

(a) Opens Up or Opens Down (circle one)

Vertex: _____

Axis of Symmetry: $x =$ _____

Maximum or Minimum (circle one)

Max or Min Value: _____

x-intercept(s): _____

y-intercept: _____

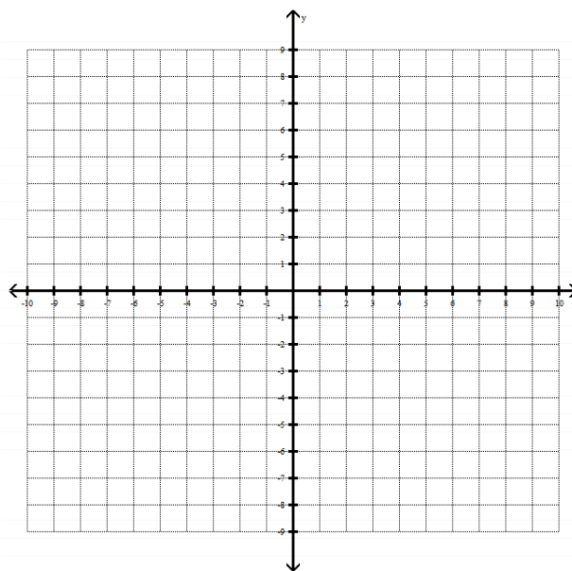
(b) Domain: _____

Range: _____

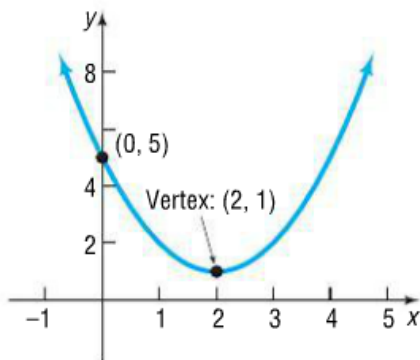
(c) Increasing Region: _____

Decreasing Region: _____

Graph:



48. Determine the quadratic function whose graph is given.



Quadratic Function: _____