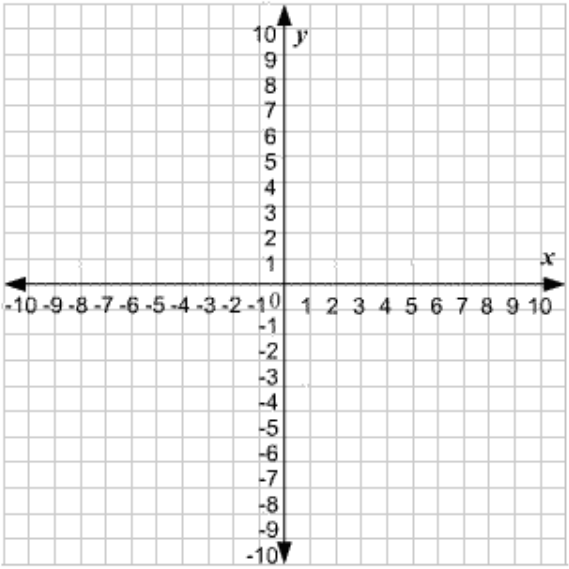
Algebra 2 _____ Just Graph!

4.1 – Worksheet - Graphing Quadratics Review Date: _____ Period: _____

Given the equation of a quadratic, graph and state all the important information.

1.) $y = -2x^2 + 12x - 9$



Vertex Form: _____

Opens: _____

Axis of Symmetry: _____

Vertex: _____

Max/Min: _____

Domain: _____

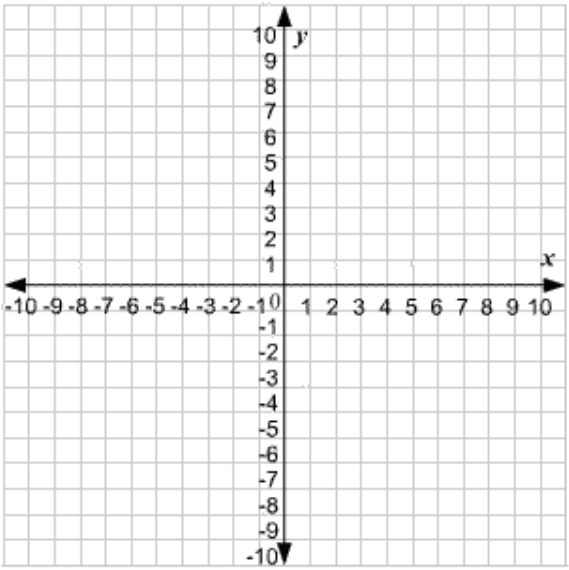
Range: _____

End Behavior:

$As\ x \to \infty, f(x) \to$ _____ Increasing: _____

$As\ x \to -\infty, f(x) \to$ _____ Decreasing: _____

2.) $y = 2(x+5)^2 - 5$



Opens: _____

Axis of Symmetry: _____

Vertex: _____

Max/Min: _____

Domain: _____

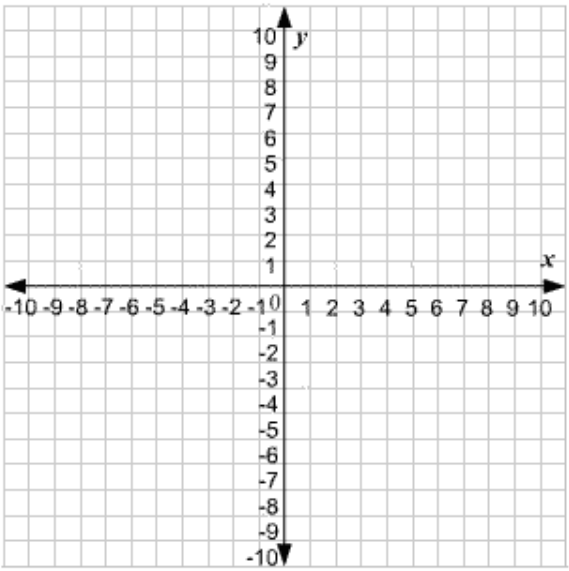
Range: _____

End Behavior:

$As\ x \to \infty, f(x) \to$ _____ Increasing: _____

$As\ x \to -\infty, f(x) \to$ _____ Decreasing: _____

3.) $y = \frac{1}{2}x^2 - 4x + 6$



Vertex Form: _____

Opens: _____

Axis of Symmetry: _____

Vertex: _____

Max/Min: _____

Domain: _____

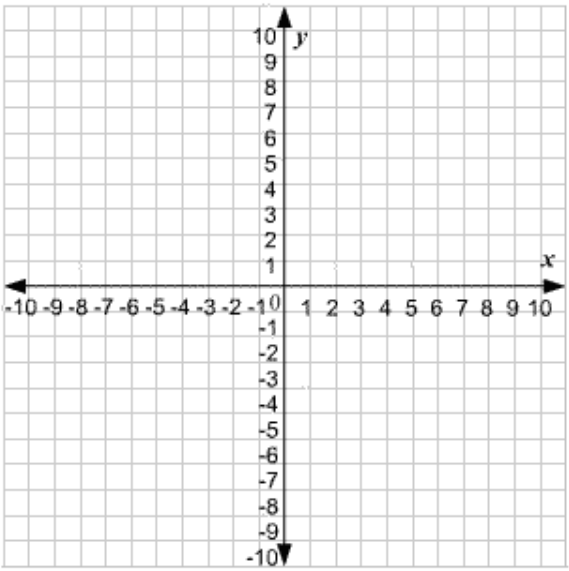
Range: _____

End Behavior:

$As\ x \to \infty, f(x) \to$ _____ Increasing: _____

$As\ x \to -\infty, f(x) \to$ _____ Decreasing: _____

4.) $y = -(x-2)^2 + 5$



Opens: _____

Axis of Symmetry: _____

Vertex: _____

Max/Min: _____

Domain: _____

Range: _____

End Behavior:

$As\ x \to \infty, f(x) \to$ _____ Increasing: _____

$As\ x \to -\infty, f(x) \to$ _____ Decreasing: _____

Factor: $3x^2 - 2x - 8$