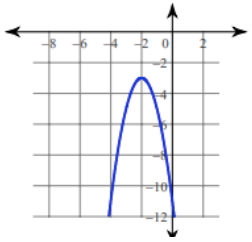
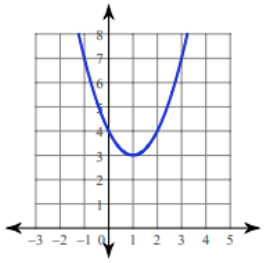
Math 2: Analyzing Quadratics

1)



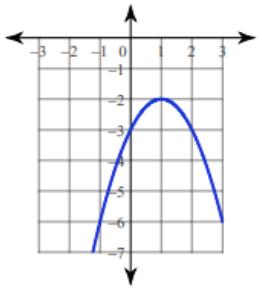
	Inequality	Interval Notation
Domain		
Range		
Increasing		
Decreasing		
End Behavior	$x \to +\infty, y \to$	$x \to -\infty, y \to$

2)



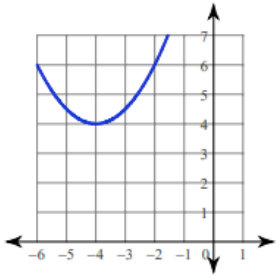
	Inequality	Interval Notation
Domain		
Range		
Increasing		
Decreasing		
End Behavior	$x \to +\infty, y \to$	$x \to -\infty, y \to$

3)



	Inequality	Interval Notation
Domain		
Range		
Increasing		
Decreasing		
End Behavior	$x \to +\infty, y \to$	$x \to -\infty, y \to$

4)



	Inequality	Interval Notation
Domain		
Range		
Increasing		
Decreasing		
End Behavior	$x \to +\infty, y \to$	$x \to -\infty, y \to$

5) $f(x) = 2(x - 5)^2 - 10$

Identify the vertex and sketch a graph:

	Inequality	Interval Notation
Domain		
Range		
Increasing		
Decreasing		
End Behavior	$x \to +\infty, y \to$	$x \to -\infty, y \to$

6) $g(x) = -\frac{1}{2}x^2 + 5$

Identify the vertex and sketch a graph:

	Inequality	Interval Notation
Domain		
Range		
Increasing		
Decreasing		
End Behavior	$x \to +\infty, y \to$	$x \to -\infty, y \to$

7) $h(x) = -x^2 + 10x - 9$

Identify the vertex and sketch a graph:

	Inequality	Interval Notation
Domain		
Range		
Increasing		
Decreasing		
End Behavior	$x \to +\infty, y \to$	$x \to -\infty, y \to$

8) $y = 0.25x^2 + 2x + 8$

Identify the vertex and sketch a graph:

	Inequality	Interval Notation
Domain		
Range		
Increasing		
Decreasing		
End Behavior	$x \to +\infty, y \to$	$x \to -\infty, y \to$

9) $f(x) = 5(x - 12)(x + 2)$

Identify the vertex and sketch a graph:

	Inequality	Interval Notation
Domain		
Range		
Increasing		
Decreasing		
End Behavior	$x \to +\infty, y \to$	$x \to -\infty, y \to$

10) $A(x) = -(x + 1)(x + 9)$

Identify the vertex and sketch a graph:

	Inequality	Interval Notation
Domain		
Range		
Increasing		
Decreasing		
End Behavior	$x \to +\infty, y \to$	$x \to -\infty, y \to$