Name: _____

SM2 7.1: Quadratics with Technology

Using desmos.com/calculator, identify the given properties for each graph.

1)	$y = 2x^2 + 8x - 9$ Vertex: _____ Roots: _____ Domain: _____ Range: _____ Axis of Symmetry: _____ y-intercept: _____ Increasing: _____ Decreasing: _____ Positive: _____ Negative: _____	2)	$y = -\frac{1}{3}x^2 - \frac{7}{3}x$ Vertex: _____ Roots: _____ Domain: _____ Range: _____ Axis of Symmetry: _____ y-intercept: _____ Increasing: _____ Decreasing: _____ Positive: _____ Negative: _____
3)	$y = -x^2 - 5x - 5$ Vertex: _____ Roots: _____ Domain: _____ Range: _____ Axis of Symmetry: _____ y-intercept: _____ Increasing: _____ Decreasing: _____ Positive: _____ Negative: _____	4)	$f(x) = \frac{1}{4}x^2 - 16x + 7$ Vertex: _____ Roots: _____ Domain: _____ Range: _____ Axis of Symmetry: _____ y-intercept: _____ Increasing: _____ Decreasing: _____ Positive: _____ Negative: _____

Find the indicated property of the function using the graphing calculator.

5)	$y = \frac{1}{2}x^2 + \frac{9}{2}x + 14$ Vertex:	6)	$y = 2x^2 + 6x + 2$ Roots:
7)	$y = -2x^2 + 10x - 13$ Roots:	8)	$y = -x^2 + 7x + 16$ y-intercept:
9)	$y = x^2 + 7x + 8$ Increasing:	10)	$y = -x^2 - 9x - \frac{77}{4}$ Negative:
11)	$y = -x^2 - 5x - \frac{29}{4}$ Positive:	12)	$f(x) = -x^2 - 3x - 3$ Range: