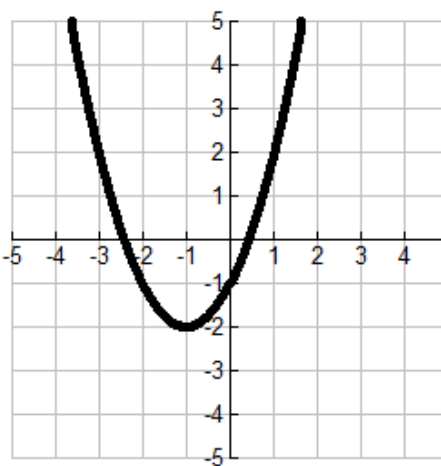


8.1 Key Features of Graphs of a Quadratic Function – Notes

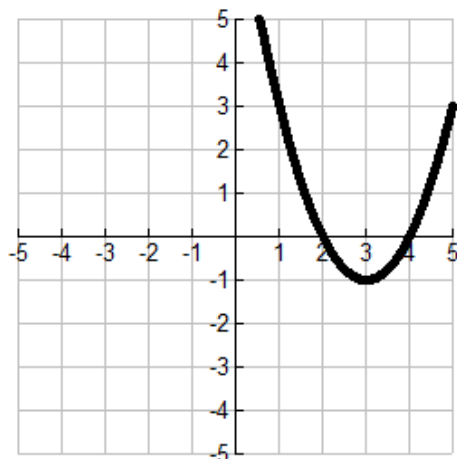
Name _____

Algebra I

Block _____ Date _____

Domain:	
Range:	
Zeros:	
Vertex:	
Axis of Symmetry:	
Intervals of increasing:	When do I use brackets [] ?
Interval of decreasing:	When do I use parenthesis () ?

Example 1 $y = (x - 3)^2 - 1$



Domain: _____

Range: _____

Vertex: _____ Min / Max ?

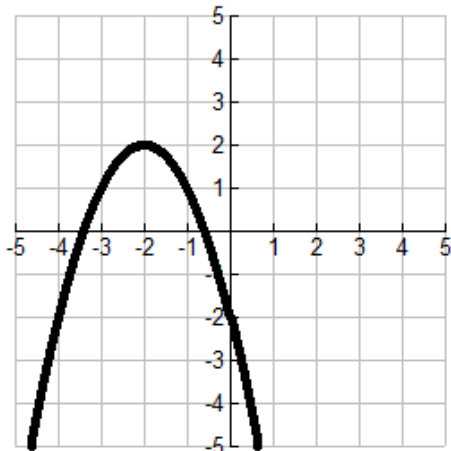
Axis of Symmetry: _____

Interval of Increase: _____

Interval of Decrease: _____

Zeros: _____

Example 2 $y = -(x + 2)^2 + 2$



Domain: _____

Range: _____

Vertex: _____ Min / Max ?

Axis of Symmetry: _____

Interval of Increase: _____

Interval of Decrease: _____

Zeros: _____

Example 3 $y = -(x - 4)^2 + 4$

x	Show your work	y
2		
3		
4		
5		
6		

Domain: _____

Range: _____

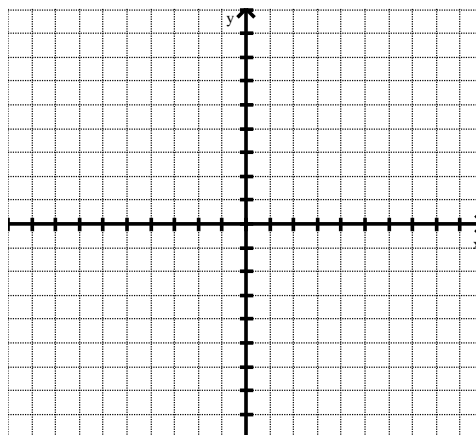
Vertex: _____ Min / Max ?

Axis of Symmetry: _____

Interval of Increase: _____

Interval of Decrease: _____

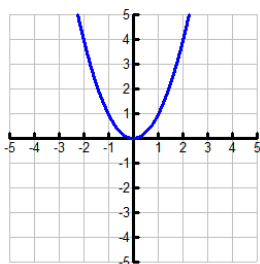
Zeros: _____



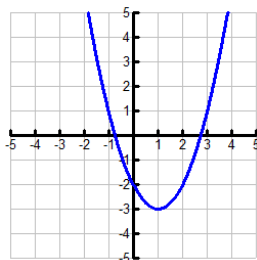
Example 4 Describe how the new graph differs from the parent function $f(x) = x^2$.

Parent Function

$$f(x) = x^2$$



a) $g(x) = (x - 1)^2 - 3$



b) $g(x) = -(x + 2)^2 - 1$

