

## Quadratics Quiz

1. Complete the following chart:

Characteristics	$y = 2(x - 2)^2 + 3$	$y = -1(x + 4)^2 - 5$	$y = \frac{1}{2}(x + 1)^2 + 2$
a) direction of opening			
b) does it have a max/min point			
c) max/min value			
d) shape (normal, narrower, wider)			
e) axis of symmetry			
f) coordinates of the vertex			
g) domain of the function			
h) range of the function			
i) table of values			

2. Complete the trinomial square on the following quadratic function converting to form:

$$y = a(x - p)^2 + q$$

$$y = 3x^2 - 5x + 1$$

3. Use the min/max and axis of symmetry formulas to determine the coordinates of the vertex of:  $y = -4x^2 + 7x - 3$