

Quadratic Functions

Name: _____

1. The following equations are in Vertex Form. Please complete the chart.

	Vertex Form... Remember: $y = a(x-h)^2 + k$	a	h think opposite	k	Vertex (h, k)	Axis of symmetry $x = h$	Range	Max OR Min	Max / Min y value	Standard Form $y = ax^2 + bx + c$
a)	$y = \frac{3}{4}(x - 2)^2 + 6$									
b)	$y = -(x - 5)^2 - 3$									
c)	$y = 9(x - \frac{1}{2})^2 + 10$									
d)	$y = -2(x + 3)^2 + 4$									
e)	$y = 5(x - 1)^2$									
f)	$y = 4x^2 + 6$									
g)	$y = (x - 3)^2 - 17$									
h)	$y = x^2 - 5$									
i)	$y = \frac{3}{4}(x + 2)^2 + 1$									
j)	$y = -4.9(x - 1.5)^2 + 40.2$									
k)	$y = x^2$									
l)	$y = (x - 2)^2$									
m)	$y = -3(x + 5)^2 - 4$									
n)	$y = \frac{1}{2}(x - 8)^2 + 7$									

2. Sketch each of the above equations with **3 key points** labeled (vertex, y intercept and it's reflection)