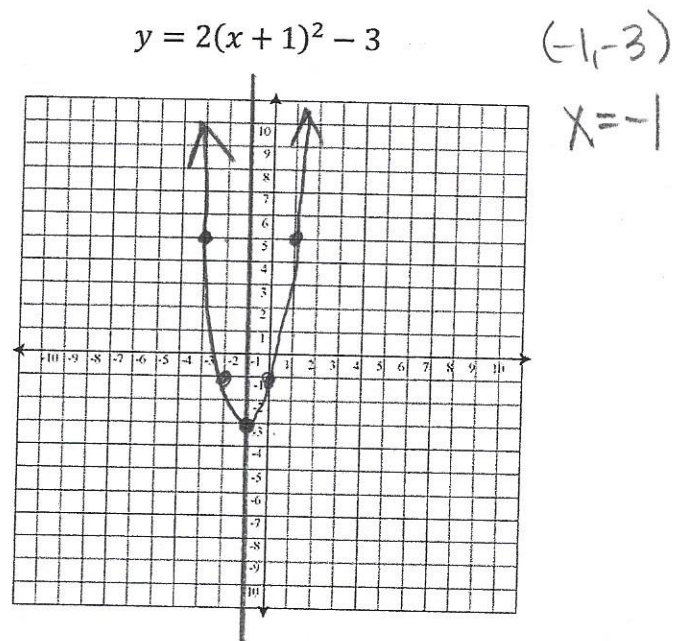
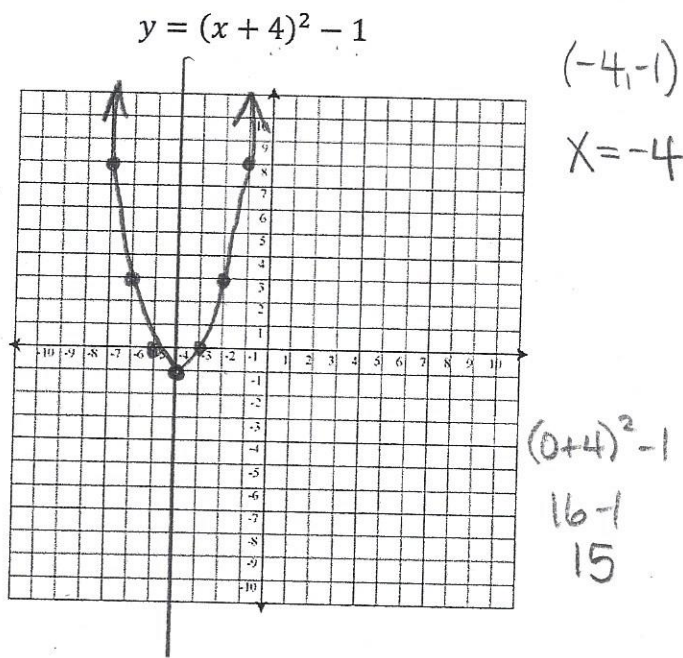


Graphing Quadratics – Vertex Form Day 1

Vertex Form: $y = a(x-h)^2 + k$

Characteristics:

- The vertex is (h, k)
- The axis of symmetry is $x = h$
- The graph opens up if $a > 0$ and down if $a < 0$



Vertex	$(-4, -1)$	Max/Min	Min = -1 @ $x = -4$
AOS	$x = -4$	Zero(s)	$x = -3$ $x = -5$
Opens	up	y-intercept	$(0, 15)$
Domain	$(-\infty, \infty)$	Range	$[-1, \infty)$

Vertex	$(-1, -3)$	Max/Min	Min = -3 @ $x = -1$
AOS	$x = -1$	Zero(s)	$x = .5$ $x = -2.5$
Opens	up	y-intercept	$(0, -1)$
Domain	$(-\infty, \infty)$	Range	$[-3, \infty)$