

Monday February 6, 2012
 Ho #2
 Wednesday / February 31st www.mrpineda.com
 3-5pm 3-4

Q: How do we graph an equation of the form $y = ax^2 + c$?

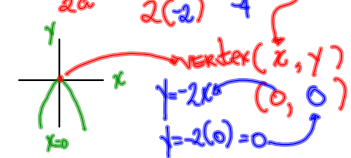
Do Now: Give equation $y = -2x^2$



find (1) y intercept
 (2) in which direction the graph opens?
 (3) Axis of symmetry
 (4) vertex

$y = ax^2 + bx + c$
 $y = -2x^2$

$a = -2$ (2) or if its right (1)
 $b = 0$
 $c = 0$ → y intercept (2)

(3) $x = \frac{-b}{2a} = \frac{-(0)}{2(-2)} = \frac{0}{-4} = 0$

(4) 

Feb 6-9:11 AM

I- How to graph a parabola?

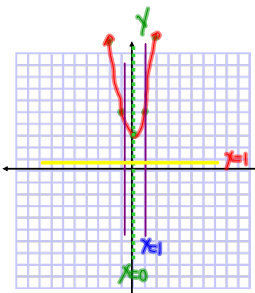
step 1: $y = 2x^2 + 3$ $y = ax^2 + bx + c$
 $a = 2$ $b = 0$ $c = 3$

step 2: find axis of symmetry
 $x = \frac{-b}{2a} = \frac{-(0)}{2(2)} = \frac{0}{4} = 0$

step 3: create a table of x values

x	$2x^2 + 3$	y	(x, y)
-2	$2(-2)^2 + 3$	11	(-2, 11)
-1	$2(-1)^2 + 3$	5	(-1, 5)
0	$2(0)^2 + 3$	3	(0, 3)
1	$2(1)^2 + 3$	5	(1, 5)
2	$2(2)^2 + 3$	11	(2, 11)

step 4: Graph



(-2, 11)
 (-1, 5)
 (0, 3)
 (1, 5)
 (2, 11)

$y = 2x^2 + 3$
 open up.
 y-inter
 $x = 0$
 $y = 0$

Feb 6-10:05 AM

II- try it on your own

$y = -x^2 - 2x + 4$

step 1... step 4

Feb 6-10:27 AM