Monday February 6, 2012
HW #2
WEDNESDAY / Friday 3PD www.mrpineda.com
3-5pm 3-4
Aim: 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) If it's neg ∩
$b = 0$
$c = 0$ (1) y intercept
(3) $x = \frac{-b}{2a} = \frac{-(0)}{2(-2)} = \frac{0}{-4} = 0$
(4) vertex (x, y)
$y = -2(0)^2$ $(0, 0)$
$y = -2(0) = 0$
MAX
MIN

Feb 6-9:11 AM

I- How to graph a parabola?
Step1: $y = 2x^2 + 3$ $y = ax^2 + bx + c$
$a = 2$ $b = 0$ $c = 3$
Step2: find axis of symmetry
$x = \frac{-b}{2a} = \frac{-(0)}{2(2)} = \frac{0}{4} = 0$
Step3 construct 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)

Step4 Graph
(-2,11)
(-1,5)
(0,3)
(1,5)
(2,11)
$y = 2x + 3$
open up.
y-inter
$x = 1$
$x = 0$

Feb 6-10:05 AM

II- try it on your own
$y = -x^2 - 2x + 4$
step1 .... step4

Feb 6-10:27 AM