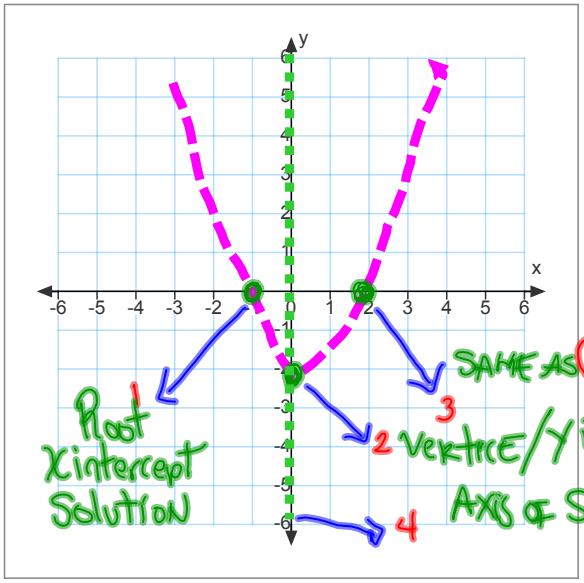
10/4/2011

Aim: How do we solve quadratic equations by graphing?

HW#7

Do Now NAME the different parts of the parabola



Oct 4-8:24 AM

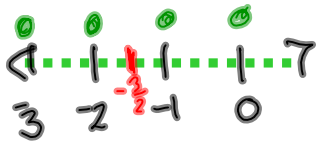
I- Solving Quadratic Equation by graphing.

1) $x^2 + 3x = 0$

$a = 1$

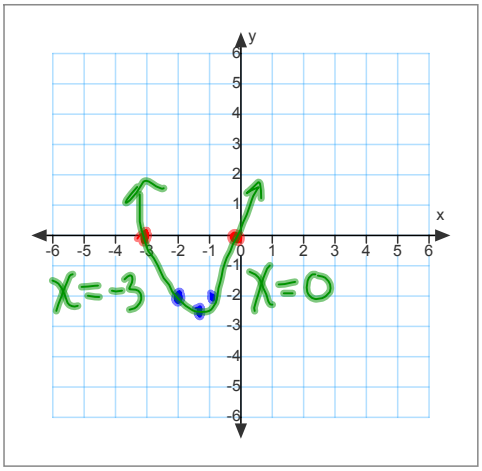
$b = 3$

$c = 0$



$x = -\frac{3}{2} = -1.5$

$x = \frac{-b}{2a} = \frac{-(3)}{2(1)} = \frac{-3}{2}$



x	$x^2 + 3x$		
-3	$9 - 9$	0 ✓	
-2	$4 - 6$	-2 ✓	
-1.5	$2.25 - 4.5$	-2.25	
-1		-2	
0		0	

$(-1.5)^2 + 3(-1.5) =$

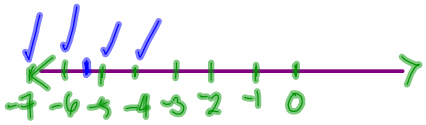
Oct 4-8:42 AM

② $x^2+11x+30=0$

① $a=1 \quad b=11 \quad c=30$

② $x=\frac{-b}{2a}=\frac{-11}{2}=-5.5$

③



$x=-6, \; x=-5$

x	$x^2+11x+30$	y	(x,y)
-7	$(-7)^2+11(-7)+30=49-77+30$	2	(-7,2)
-6	$(-6)^2+11(-6)+30=36-66+30$	0	(-6,0)
-5.5	$(-5.5)^2+11(-5.5)+30=$	-0.25	(-5.5,-0.25)
-5		0	(-5,0)
-4		2	(-4,2)

-5.5×-5.5

275

$+302.5$

-5.5×11

55

-60.50

$+60.25$

-00.25

$+30.25$

$+30.00$

60.25

Oct 4-9:01 AM