

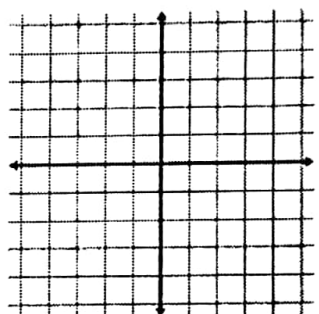
# Graphing Parabolas in Vertex Form

Basically the same thing as graphing Absolute Value

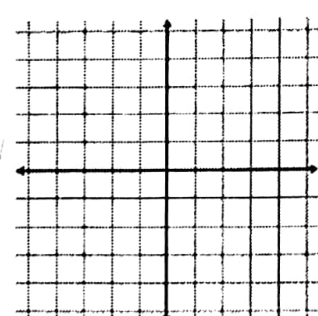
Absolute Value equation.	Vertex Form of a parabola.
$y = \pm a  x - h  + k$ opens up / down slope shift left / right shift up / down	$y = \pm a (x - h)^2 + k$ opens up / down stretch shift left / right shift up / down

Absolute Value equation.	Vertex Form of a parabola.
$y = 2  x - 3  + 5$ Shape: _____ Opens: _____ Vertex: _____ Slope: _____	$y = 2 (x - 3)^2 + 5$ Shape: _____ Opens: _____ Vertex: _____ Over 1, up _____

$y = \pm a (x - h)^2 + k$   
 $y = -1(x + 2)^2 + 3$   
 Vertex: (     ,     )  
 Opens: \_\_\_\_\_  
 Over 1, \_\_\_\_\_ direction \_\_\_\_\_ number



$y = \pm a (x - h)^2 + k$   
 $y = \frac{1}{3}(x - 1)^2 + 2$   
 Vertex: (     ,     )  
 Opens: \_\_\_\_\_  
 Over 1, \_\_\_\_\_ direction \_\_\_\_\_ number



$y = \pm a (x - h)^2 + k$   
 $y = -3(x + 2)^2$   
 Vertex: (     ,     )  
 Opens: \_\_\_\_\_  
 Over 1, \_\_\_\_\_ direction \_\_\_\_\_ number

