

## Convert to Vertex Form:

2.  $y = -2x^2 + 8x - 8$   
 $a = -2$   $b = 8$   $c = -8$

Step 1: Find Vertex  $(2, 0)$   
 $h$   $k$

Step 2:  $a = -2$   
 $\rightarrow h = 2$   
 $k = 0$

Step 3: Plug a, h, and k into vertex form.

$$f(x) = -2(x - 2)^2 + 0$$

$$f(x) = -2(x - 2)^2$$

$f(x) = a(x - h)^2 + k$   
Change It.. Keep It!

$$x = \frac{-b}{2a} = \frac{-8}{2(-2)} = \frac{-8}{-4} = 2$$

$$y = -2(2)^2 + 8(2) - 8$$
$$= -2(4) + 16 - 8$$
$$= -8 + 16 - 8 = 0$$