

**DO NOW**

Solve for x:

MILD  $x^2 + 15x + 56 = 0$

HOT:  $x^2 - 14x = -45$

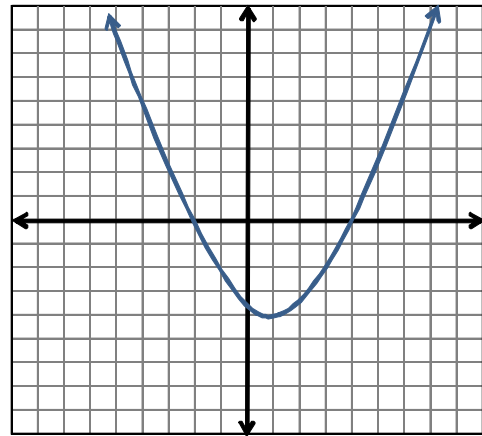
SPICY:  $2x^2 + 3x = 14$

**CHECK POINT #1**

The Quadratic Formula let's us \_\_\_\_\_

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

$$x = \frac{-\boxed{\star} \pm \sqrt{\boxed{\star}^2 - 4\boxed{\heartsuit}\boxed{\smiley}}}{2\boxed{\heartsuit}}$$



**CHECK POINT #2**

Find the x-intercepts of the quadratics:

$y = 2x^2 + 20x + 48$

$$x = \frac{-\boxed{\star} \pm \sqrt{\boxed{\star}^2 - 4\boxed{\heartsuit}\boxed{\smiley}}}{2\boxed{\heartsuit}}$$

$y = 2x^2 + 22x + 60$

$$x = \frac{-\boxed{\phantom{\star}} \pm \sqrt{\boxed{\phantom{\star}}^2 - 4\boxed{\phantom{\heartsuit}}\boxed{\phantom{\smiley}}}}{2\boxed{\phantom{\heartsuit}}}$$

## CHECK POINT #3

Find the x-intercepts of the quadratics:

$$y = 4x^2 - 14x - 30$$

$$y = 3x^2 - 39x + 120$$

## EXIT TICKET

1.  $y = 2x^2 + 10x + 12$

$$\frac{-\square \pm \sqrt{\square^2 - 4\square\square}}{2\square}$$

2.  $y = x^2 + 7x + 6$

$$\frac{-\square \pm \sqrt{\square^2 - 4\square\square}}{2\square}$$

3.  $y = 2x^2 - 10x + 8$

4.  $y = 3x^2 - 27x + 42$