

What's Going On?

Checking In

Minds on

Algebra Tiles

Action!

The Grid and FOIL

Consolidation

Exit Card

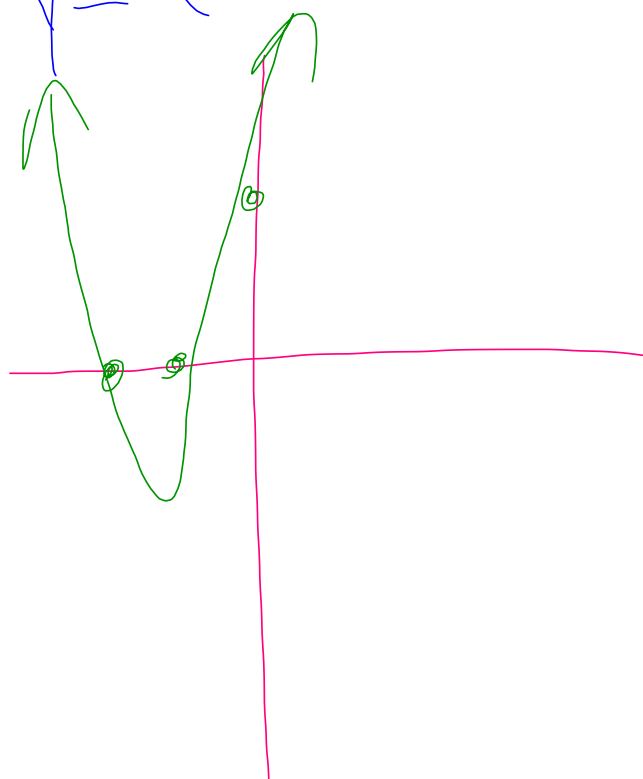
Learning Goal - I will be able to convert factored form quadratic equations into standard form.

Standard Form

$$y = x^2 + 5x + 6$$

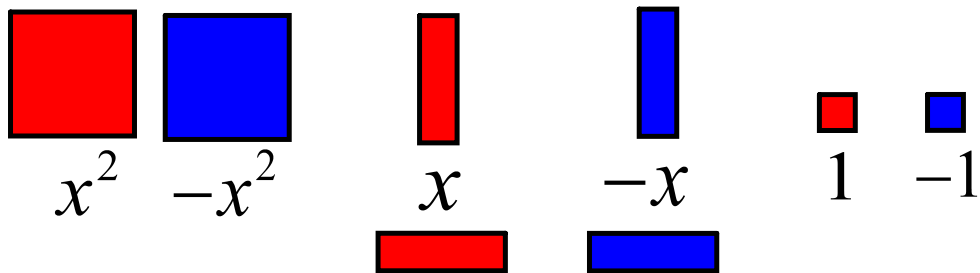
Factored Form

$$y = (x+2)(x+3)$$



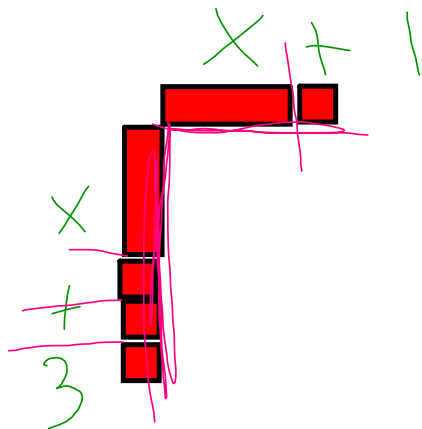
Minds on

Using Algebra Tiles!



Determine the Standard Form Equation

Factored form: $y = (x + 1)(x + 3)$

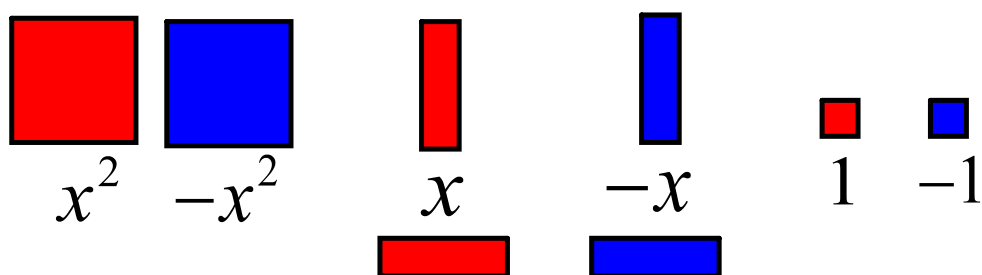


Algebra tiles representing the standard form equation $y = x^2 + 4x + 3$. The tiles are arranged in a grid, with pink lines indicating the dimensions. The vertical side is labeled $x + 3$ and the horizontal side is labeled $x + 1$.

Standard form equation: $y = x^2 + 4x + 3$

Minds on

Using Algebra Tiles!

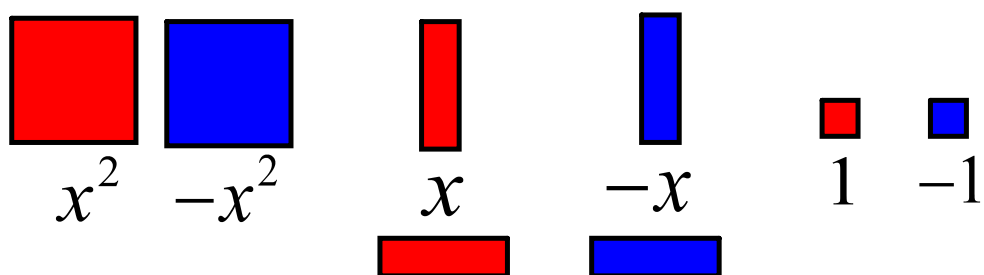


Determine the Standard Form Equation

$$y = (x + 2)(x + 4)$$

Minds on

Using Algebra Tiles!

**Determine the Standard Form Equation**

$$y = (x - 3)(x - 1)$$

Action!

The Grid and FOIL

We can also expand **WITHOUT** algebra tiles!

There are two other methods;

1. The Grid Method
2. FOIL

Action!

The Grid Method

**Determine the Standard Form Equation
Using The Grid!**

$$y = (x + 3)(x - 4)$$

$y =$	x	$+3$
x	x^2	$+3x$
-4	$-4x$	-12

$$y = x^2 - 1x - 12$$

Action!

Using The Grid!

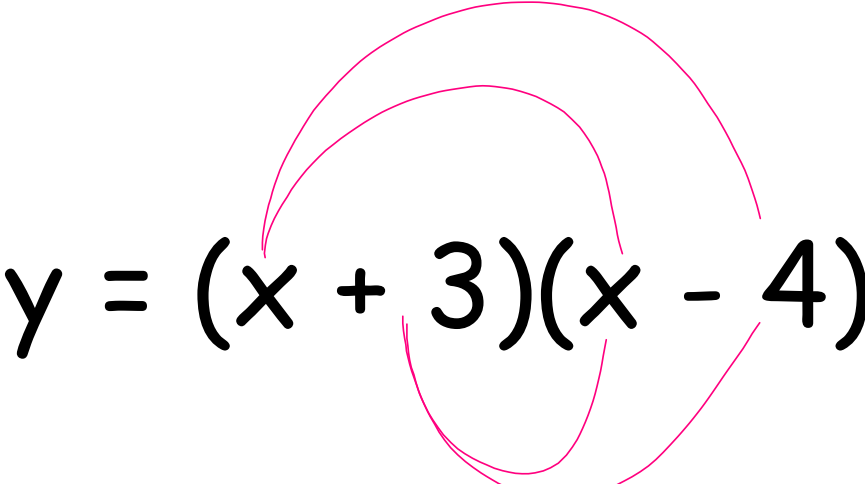
$$y = (x+5)(x+3)$$

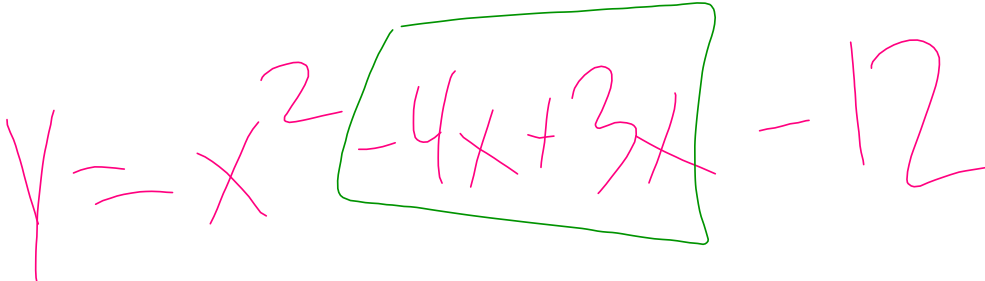
$y =$	x	$+5$
x	x^2	$5x$
$+3$	$3x$	15

$$y = x^2 + 8x + 15$$

Action!**Determine the Standard Form Equation**Using **FOIL**

$$y = (x + 3)(x - 4)$$

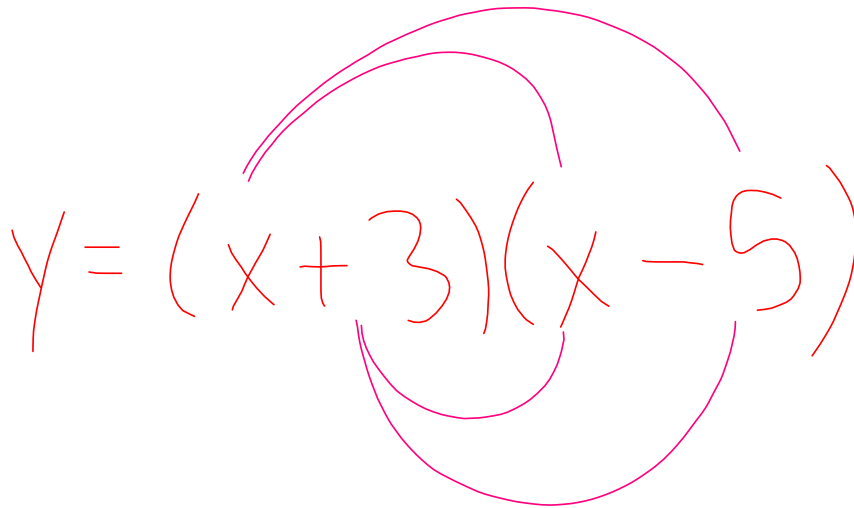
$$y = (x + 3)(x - 4)$$


$$y = x^2 - 4x + 3x - 12$$


$$y = x^2 - 1x - 12$$

Action!

Using FOIL

$$Y = (x + 3)(x - 5)$$


Consolidation

Exit Card