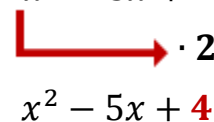
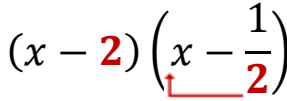


Factoring Trinomials of the form $Ax^2 + Bx + C$, where $A \neq 1$

Slide and Divide Method

Steps to Factoring $Ax^2 + Bx + C$	Example Factor: $2x^2 - 5x + 2$
<p>Slide the leading coefficient over, under the constant, and multiply the two together.</p> <p>1. Re-write the trinomial without a leading coefficient.</p>	$2x^2 - 5x + 2$  $x^2 - 5x + 4$
<p>2. Follow the same rules as when $A = 1$, and factor this new trinomial.</p>	$(x - 4)(x - 1)$
<p>3. Since we multiplied the leading coefficient with the constant in Step 1, we must now DIVIDE it out from the constants of the factors from Step 2.</p>	$\left(x - \frac{4}{2}\right)\left(x - \frac{1}{2}\right)$
<p>4. Simplify the fractions. If the denominator doesn't cancel out, ...</p>	$(x - 2)\left(x - \frac{1}{2}\right)$ 
<p>5. ... slide it up to be the coefficient of the variable.</p>	$(x - 2)(2x - 1)$

Here's Another Example...

Step	Factor: $3x^2 + x - 2$
1.	$x^2 + x - 6$
2.	$(x + 3)(x - 2)$
3.	$\left(x + \frac{3}{3}\right)\left(x - \frac{2}{3}\right)$
4.	$(x + 1)(3x - 2)$