1.3 Solve $x^2+bx+c=0$ by Factoring

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A **monomial** is an expression that is either a number, a variable, or the product of a number and one or more variables.
A **binomial**, such as x+4 is the sum of two monomials.
A **trinomial**, such as $x^2+11x-28$ is the sum of three monomials.

Factor trinomials of the form x^2+bx+c

Ex 1	X^2+5x+4
	$(x+4)(x+1)$
Ex 2	$X^2+3x-10$
	$(x+5)(x-2)$
Ex 3	X^2-5x+6
	$(X-3)(x-2)$
Ex 4	$X^2-4x-12$
	$(x-6)(x+2)$

Factor with Special Patterns

Difference of Two Squares		$A^2-b^2=(a+b)(a-b)$		$X^2-4=(x+2)(x-2)$
Perfect Square Trinomial		$A^2+2ab+b^2=(a+b)^2$		$X^2+6x+9=(x+3)^2$
		$A^2-2ab+b^2=(a-b)^2$		$X^2-4x+4=(x-2)^2$

Zero Product Property

If the product of two expressions is zero, then one or both of the expressions equal zero.

If A and B are the expressions and AB=0, then A=0 or B=0

If (x+5)(x+2)=0, then x+5=0 or x+2=0. That is, x=-5 or x=-2