Section 5.7: Factoring by Special Products

Perfect Square Trinomial

$x^2 + 2ax + a^2 = (x + a)^2$

$x^2 - 2ax + ab^2 = (x - a)^2$

How to recognize a Perfect Square Trinomial
• There must be three terms.
• The first (x^2) term and the last term (a^2) must be perfect squares.
• There must be no minus sign before the first or last terms.
• If you multiply x and a & double the result, you get the middle term $2ax$ (or -$2ax$).

Perfect Square Table:

n	1	2	3	4	5	6	7	8	9	10
n^2	1	4	9	16	25	36	49	64	81	100