Factoring Quadratics: Special Cases

Learning Goal

Factor perfect-square trinomials and difference of squares.

Minds on...



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Factors	Perfect Square	Factors	Perfect Square
1 x 1	= 1	11 x 11	= 121
2 x 2	= 4	12 x 12	= 144
3 x 3	= 9	13 x 13	= 169
4 x 4	= 16	14 x 14	= 196
5 x 5	= 25	15 x 15	= 225
6 x 6	= 36	16 x 16	= 256
7 x 7	= 49	17 x 17	= 289
8 x 8	= 64	18 x 18	= 324
9 x 9	= 81	19 x 19	= 361
10 x 10	= 100	20 x 20	= 400

Big Ideas



Examples



٨ Factor Check for Perfect Square $8[\chi^{2} + |44\chi + 64]$ = $(9\chi + 8)^{2}$ 581 = 9 V64 = 8 $(9)(8)(2) = 144^{1}$

Big Ideas (continued)

- Difference of Squares
 - $a^2 b^2$
 - = (a + b)(a b)

More Examples



Consolidation

Sou need to be suspicious whenever you notice the perfect squares!



Reinforcement