

3.8 Factoring Special Polynomials

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10:56 AM

$a^2 + 2ab + b^2$ is a perfect square trinomial
 $= (a+b)(a+b)$ or $(a+b)^2$

Ex. #1

Factor each trinomial. Verify by multiplying the factors

(a.) $36x^2 + 12x + 1$ $(6x + 1)(6x + 1)$
 $= (6x + 1)^2$

perfect square $6 \times 6 = 36$ $1 \times 1 = 1$

(b.) $16 - 56x + 49x^2$ ✓

$49x^2 - 56x + 16$ ← 4×4
 $= (7x - 4)(7x - 4)$
 $= (7x - 4)^2$

$(7x - 4)(7x - 4)$

$49x^2 - 28x - 28x + 16$
 $= 49x^2 - 56x + 16$ ✓

pg. 180 #1-9 every other letter
186 #1-15 every other letter, 18-22