

Lesson 2.5 Special Cases

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Perfect Square (Case 1)

Eg. Find the area of a square that has a side length of  $2x + 3$ .

square the first Double the product square the last
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Now, lets work backwards!

\* look for perfect squares on first and last terms!

Factor 1)  $4x^2 + 12x + 9$

Do the opposite of squaring!
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2) Factor  $16x^2 - 8x + 1$

Difference of Squares (case 2)

\*look for a binomial with a subtract sign in between two perfect squares.

$$a^2 - b^2 = (a + b)(a - b)$$

Factor.

Eg.1)  $4x^2 - 9$

You need to set up 2 sets of brackets, one positive, and one negative!

Now take the square root of the first and last term!

Check

Eg. 2)  $121y^4 - 25z^{10}$

\*3)  $16x^4 - 1$

HW Pg 115 # 3 -7, \*9, 11, \*12