

Special Binomials

Difference of Squares

• Multiply $(2x + 3)(2x - 3)$

• What happened to the middle term? Why?

Example $36x^2 - 25$

$$(6x + 5)(6x - 5)$$

$$1^2 = 1$$

$$7^2 = 49$$

$$2^2 = 4$$

$$8^2 = 64$$

$$3^2 = 9$$

$$9^2 = 81$$

Example $x^4 - 81$

$$4^2 = 16$$

$$10^2 = 100$$

$$5^2 = 25$$

$$11^2 = 121$$

$$(x^2 + 9)(x^2 - 9)$$

$$6^2 = 36$$

$$12^2 = 144$$

Assignment: pg 562 # 8-13, 21-26

Factoring $ax^2 + bx + c$

Example $2x^2 + 7x + 5$

• Write out factors of 1st and 3rd term.

1, 2

5, 1

GUESS AND CHECK

$$(x + 1)(2x + 5)$$

Assignment: pg 552 # 1-6

(Review pg 557 # 12-26)