

Notes 6.1

Double D!

Ex. 1

$$(x + 3)(x - 5)$$
$$x^2 - 5x + 3x - 15$$
$$x^2 - 2x - 15$$

Standard Form

$$Ax^2 + Bx + C$$

or

$$Ax^2 + Bxy + Cy^2$$

Ex. 2

$$(4 + n)^2$$
$$(4+n)(4+n)$$
$$16 + 4n + 4n + n^2$$
$$16 + 8n + n^2$$
$$n^2 + 8n + 16$$

Ex. 3

$$(2x - 5y)^2$$
$$(2x-5y)(2x-5y)$$
$$4x^2 - 10xy - 10xy + 25y^2$$
$$4x^2 - 20xy + 25y^2$$

Ex. 4

$$3(x + 2)^2$$
$$3(x+2)(x+2)$$
$$3(x^2 + 2x + 2x + 4)$$
$$3(x^2 + 4x + 4)$$
$$3x^2 + 12x + 12$$

Ex. 5

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

$$(x+2)(x+2) - (x-2)(x-2)$$

$$x^2 + 2x + 2x + 4 - (x^2 - 2x - 2x + 4)$$

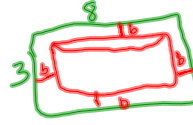
$$x^2 + 4x + 4 - (x^2 - 4x + 4)$$

$$x^2 + 4x + 4 - x^2 + 4x - 4$$

$$8x$$

Ex. 6

The senior class at East High School is holding a Cutest-Baby Picture Contest. The bulletin board they will use to display the pictures measures 8 ft by 3 ft. The decorating committee plans to put a border of the school colors all around the interior edge of the bulletin board. The border will be b inches wide. Write an expression for the area that is available for the pictures.



$$(8-2b)(3-2b)$$

$$24 - 16b - 6b + 4b^2$$

$$24 - 22b + 4b^2$$

$$4b^2 - 22b + 24$$