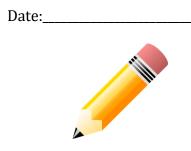
Name:_____ Notes Algebra Section 9.3 Pages 569-574



Goal: "You will use special product patterns to multiply polynomials"

Special Products Formulas 1. $(a + b)^2 =$ **2.** $(a - b)^2 =$ **3.** (a + b)(a - b) =

Foil then try to find the pattern and come up with a formula for $(a + b)^2$.

Ex: $(x + y)^2$ **Ex:** $(3 + x)^2$ **Ex:** $(2x + y)^2$

Multiply each polynomial by applying the special products formula:

Ex: $(x + 3)^2$ **Ex:** $(2x + 1)^2$ **Ex:** $(3m + n)^2$

Ex: $(x + 5)^2$ **Ex:** $(3x + 4)^2$ **Ex:** $(2x + 5)^2$

Foil. Then try and find a pattern to come up with a formula for $(a - b)^2$.

Ex: $(x-y)^2$ **Ex:** $(2x-y)^2$ **Ex:** $(x-3)^2$

Multiply each polynomial by applying the special products formula:

Ex: $(4x - y)^2$ **Ex:** $(2x - 3)^2$

Ex:
$$(5x - 2y)^2$$
 Ex: $(3x - 4y)^2$

Foil. Then try and find a pattern to come up with a formula for $(a + b)(a - b)^$

Ex: (x + y)(x - y) **Ex:** (2x - 3y)(2x + 3y) **Ex:** (c + 3d)(c - 3d)

Multiply each polynomial by applying the special products formula:

Ex:
$$(t+5)(t-5)$$
 Ex: $(3x+y)(3x-y)$ **Ex:** $(x+10)(x-10)$

Ex:
$$(2x + 1)(2x - 1)$$
 Ex: $(r + 3)(r - 3)$ **Ex:** $(x + 3y)(x - 3y)$