	Name:	Date:
	Topic/Objective: Multiply Polynomials	Class/Period:

Questions/Main Ideas:	Notes:
How do you multiply polynomials?	To multiply polynomials use the Distributive Property
Steps to Multiplying monomials x polynomial: 1. Apply the Distributive Property. 2. Combine Like Terms. 3. Write in standard form.	1. $x(3x+6)$ $3x^2+6x$ 2.) $2x(3x^2-4x+5)$ $6x^3-8x^2+10x$ 3.) $(-2x^3-4x+1)(6x^2)$ $-12x^5-24x^3+6x^2$ 4.) $-5x^2(7x+4)$ $-35x^3-20x^2$ 5.) $3x(2x^2-x+5x^4+8)$ $6x^3-3x^2+15x^5+24x$ $15x^5+6x^3-3x^2+24x$ 6.) $-2x^3(3x^4+6-8x^2)$ $-6x^7-12x^3+16x^5$ $-6x^7+16x^5-12x^3$

Binomial x Binomial

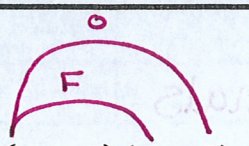
To multiply two binomials, we FOIL! Or.....something else!

First

Outside

Inside

Last



1.) $(x-2)(x+3)$

$x^2+3x-2x-6$

x^2+x-6

2.) $(x+8)(x-7)$

$x^2-7x+8x-56$

x^2+x-56

3.) $(3x-4)(2x+1)$

$6x^2+3x-8x-4$

$6x^2-5x-4$

4.) $(2x+3)(5x+1)$

$10x^2+2x+15x+3$

$10x^2+17x+3$

5.) $(2x-5)^2$

$(2x-5)(2x-5)$

$4x^2-10x-10x+25$

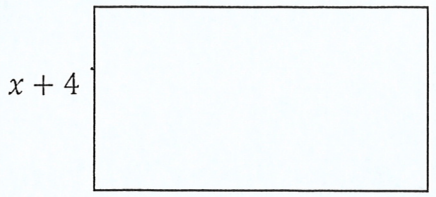
$4x^2-20x+25$

6.) $(x+5)(-2x-8)$

$-2x^2-8x-10x-40$

$-2x^2-18x-40$

Find the area of the figure below.



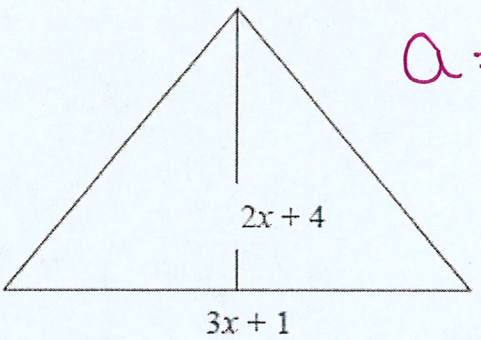
$A = lw$

$(x+4)(2x-3)$

$2x^2 - 3x + 8x - 12$

$2x^2 + 5x - 12$

Find the area of the figure below.



$A = \frac{1}{2}bh$

$\frac{1}{2}(3x+1)(2x+4)$

$\frac{1}{2}(6x^2 + 12x + 2x + 4)$

$\frac{1}{2}(6x^2 + 14x + 4)$

$3x^2 + 7x + 2$

Summary: