Name:		Period:	Date:	GPA 14-4, 14-5
<u>1</u>	4-4, 14-5 M	ultiplying Po	olynomials	
*Remember:				
1) When we are multiplying integers, va	riables, or othe	er terms, if they	<i>i</i> have	
Different signs $\rightarrow$		Same signs –	>	
9 * -2 =	−9 * −2 = <u></u>			
2) When we multiply terms with expone	ents, we <u>add</u> th	e exponents of	the like terms.	
$a^5 * a^4 =$	$b^7 * b^{-2} =$			
Ex. 1: Multiply using Distributive Proper	ty. Then, simpl	ify if needed.		
A. $(9x^5y^7)(-2x^4y^4)$		D. 8	$y(5x^2-2y)$	
B. $(-4x^3y^2)(-7x^5y^3)$		E. —	$7x^9y^4(6x^3y + x^2)$	$-4xy^{5}-8)$
C. $3(5x + 2y^2)$		F. —	$4x^2y^3(-5xy^4+3)$	$(x^4) - x^3 v^7 + 8$
				,,
When multiplying a binomial by a binomial, we still use the distributive property. However, we have a method that helps us keep our work organized called the		e		(x+4)(x-1)
method.				
For 2. Multiply uping the fail mathed				
A. $(x + 3)(x + 2)$	C. (7 <i>m</i> + 2	2)(3m-8)	E.	(a-2)(b-8)

B. 
$$(2y+1)(5y+3)$$
  
D.  $(3c-5a)(2c+4d)$ 

Special Products: 1)  $(a + b)^2$ 

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

3) 
$$(a + b)(a - b)$$

Ex. 3: Multiply using the foil method and the trick using the pattern with the special products. A.  $(x + 3)^2$  B.  $(y - 4)^2$  C. (x + 7)(x - 7)