

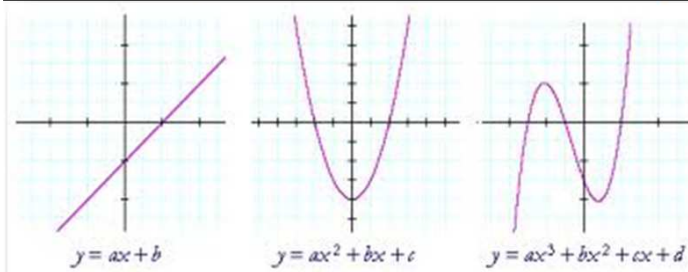
More on Polynomials

Name _____

Date _____

1.

Just for fun: compare degree of function to number of curves in its graph



Find the product of these binomials

$(3x + 4)$	$(3x + 4)$	
$(3x + 4)$	$(3x - 4)$	
$(3x - 4)$	$(3x - 4)$	
$(z - 5)$	$(z - 5)$	
$(z - 6)$	$(z + 6)$	
$(z + 6)$	$(z + 6)$	
$(4a + 12)$	$(4a + 12)$	
$(4a - 12)$	$(4a + 12)$	
$(3m + 11n)$	$(3m + 11n)$	
$(3m - 11n)$	$(3m - 11n)$	

2. Mental Math: convert this to a sum and difference of binomials problem, and then solve: $7 \cdot 13$

sum	difference	product

3. Mental Math: convert these to binomials and solve

problem	conversion	generic pattern	problem pattern	product
16^2	$(20 - 4)^2$	$a^2 - 2ab + b^2$		
11^2				
$9 \cdot 13$				
$28 \cdot 32$				

4. Write 2 binomials that have the product $x^2 - 36$

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5. Solve for x:

Problem	x =	or x =
$(x + 3)(x - 6) = 0$		
$(x + 7)(x + 5) = 0$		
$(x - 3)(x - 9) = 0$		
$(3x + 6)(5x - 15) = 0$		
$(x - 11)(4x - 16) = 0$		

6. Solve the equation by factoring:

Problem	Factored	x =	or x =
$4x^2 + 16x = 0$			
$9x^2 - 18x = 0$			
$4x^2 = 8x$			
$2x^2 = 4x$			
$6x^4 - 3x^2 = 0$			