

Multiplying Polynomials

Friday, March 6, 2020 8:40 AM

Review: ① $3r(4r-7)$

$$12r^2 - 21r$$

② $-4x(2x^2-7x+5)$

$$-8x^3 + 28x^2 - 20x$$

Area.

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

$(x+2)(x+3)$

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

$$= x^2 + 5x + 6$$

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

	$3x$	-5
$2x$	$6x^2$	$-10x$
$+3$	$+9x$	-15

$$= 6x^2 - x - 15$$

$$3x + 4x = 7x$$

$(3x-5)(4x-2)$

	$4x$	-2
$3x$	$12x^2$	$-20x$
-5	$-6x$	$+10$

$$= 12x^2 - 26x + 10$$

$$3x \cdot 4x = 12x^2$$

Distributive Method:

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$$(x+4)(x+5) = x^2 + 5x + 4x + 20$$

$$= x^2 + 9x + 20$$

FOIL
 First
 Outer
 Inner
 Last

$$(2x-7)(3x+4)$$

$$6x^2 + 8x - 21x - 28$$

$$6x^2 - 13x - 28$$

Try: $(2x-1)(4x+5)$

$$8x^2 + 10x - 4x - 5$$

$$8x^2 + 6x - 5$$

$$(2x+3y)(4x-5y)$$

	$2x$	$+ 3y$	
$4x$	$8x^2$	$+ 12xy$	
$-5y$	$-10xy$	$-15y^2$	

$$= 8x^2 + 2xy - 15y^2$$

$$(3x+2y)^2 = (3x+2y)(3x+2y)$$

$$9x^2 + 6xy + 6xy + 4y^2$$

$$9x^2 + 12xy + 4y^2$$

perfect square trinomial

$$(2x + 5y)(2x - 5y)$$

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

$$4x^2 - 25y^2$$

difference of squares

$$(3x + 2)(2x^2 + 7x - 5)$$

	$2x^2$	$+7x$	-5
$3x$	$6x^3$	$+21x^2$	$-15x$
$+2$	$+4x^2$	$+14x$	-10

$$6x^3 + 25x^2 - x - 10$$

$$(2x - 3)(x^2 + 9x + 4)$$

$$2x^3 + 18x^2 - 8x - 3x^2 - 27x + 12$$

$$2x^3 + 15x^2 - 35x + 12$$

Text Pg 209-210 # 1 (odd), 3-5
 Ho Pg 357 # 2, 17-18 (odd letters)