

Name: _____
 Date: _____
 Class: _____

$(2x^2 + 3x - 5)(x^2 - 4x + 7)$
 $(2x^2 + 3x - 5)(x^2 - 4x + 7)$

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

$(2x^2 + 3x - 5)(x^2 - 4x + 7)$
 $2x^2(x^2 - 4x + 7) + 3x(x^2 - 4x + 7) - 5(x^2 - 4x + 7)$
 $2x^4 - 8x^3 + 14x^2 + 3x^3 - 12x^2 + 21x - 5x^2 + 20x - 35$
 $2x^4 - 5x^3 + 2x^2 + 41x - 35$

$(x^2 + 5)(2x^2 - 3x + 4)$
 $x^2(2x^2 - 3x + 4) + 5(2x^2 - 3x + 4)$
 $2x^4 - 3x^3 + 4x^2 + 10x^2 - 15x + 20$
 $2x^4 - 3x^3 + 14x^2 - 15x + 20$

Multiplying Binomial by Trinomial

$(3x + 2)(x^2 + 4x + 1)$
 $(3x + 2)(x^2 + 4x + 1)$

$(x + 1)(x^2 + 3x + 2)$
 $(x + 1)(x^2 + 3x + 2)$

$(x + 2)(x^2 + 5x + 6)$
 $(x + 2)(x^2 + 5x + 6)$

$(3x + 2)(x^2 + 4x + 1)$
 $3x(x^2 + 4x + 1) + 2(x^2 + 4x + 1)$
 $3x^3 + 12x^2 + 3x + 2x^2 + 8x + 2$
 $3x^3 + 14x^2 + 11x + 2$

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

Multiplying
 $(x^2 + 3x + 2)(x^2 + 4x + 1)$
 $(x^2 + 3x + 2)(x^2 + 4x + 1)$
 $x^2(x^2 + 4x + 1) + 3x(x^2 + 4x + 1) + 2(x^2 + 4x + 1)$
 $x^4 + 4x^3 + x^2 + 3x^3 + 12x^2 + 3x + 2x^2 + 8x + 2$
 $x^4 + 7x^3 + 13x^2 + 11x + 2$

$(x + 2)(x^2 + 5x + 6)$
 $x(x^2 + 5x + 6) + 2(x^2 + 5x + 6)$
 $x^3 + 5x^2 + 6x + 2x^2 + 10x + 12$
 $x^3 + 7x^2 + 16x + 12$