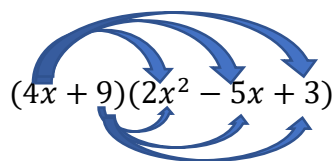


Multiplying Polynomials #7 Notes

Example 1: Multiplying Monomials

$$(4x + 9)(2x^2 - 5x + 3)$$



Multiply the $4x$ through the $2x^2$, $-5x$ and 3 , and then do the same with the 9

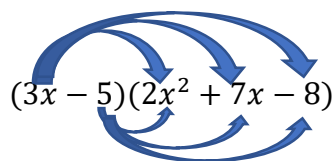
$$4x \cdot 2x^2 + 4x \cdot -5x + 4x \cdot 3 + 9 \cdot 2x^2 + 9 \cdot -5x + 9 \cdot 3$$

$$8x^3 - 20x^2 + 12x + 18x^2 - 45x + 27$$

$$8x^3 - 2x^2 - 33x + 27$$

Example 2: Multiplying Monomials

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



Multiply the $3x$ through the $2x^2$, $7x$ and -8 , and then do the same with the -5

$$3x \cdot 2x^2 + 3x \cdot 7x + 3x \cdot -8 + -5 \cdot 2x^2 + -5 \cdot 7x + -5 \cdot -8$$

$$6x^3 + 21x^2 - 24x - 10x^2 - 35x + 40$$

$$6x^3 + 11x^2 - 59x + 40$$