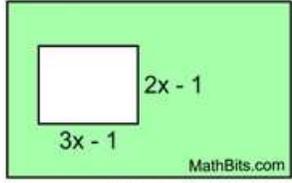




Unit 7: Polynomials
OBJECTIVE CHECKLIST AND TOPICS OVERVIEW

Objective	Example	Answer	Rating (Circle One)
Naming Polynomials	$(3x - 7x^2 + 1)$	Quadratic Trinomial	☺ ☹ ☠
Adding Polynomials	$(-x - 7x^2 + 3) + (5x^2 - 4 - x)$	$-2x^2 - 2x - 1$	☺ ☹ ☠
Subtracting Polynomials	$(7x^4 + x^3 - 2x^2 + 1) - (5x^3 - 4x^4 + 2 - 7x)$	$11x^4 - 4x^3 - 2x^2 + 7x - 1$	☺ ☹ ☠
Multiplying Polynomials (distributing a monomial)	$(3k)(5k^4 - 4k^2 + 3)$	$15k^5 - 12k^3 + 9k$	☺ ☹ ☠
Multiplying Polynomials (two binomials ... FOIL)	$(7x + 3)(5x - 4)$	$35x^2 - 28x + 15x - 12$ $35x^2 - 13x - 12$	☺ ☹ ☠
Multiplying Polynomials (binomial to trinomial)	$(2x + 3)(4x^2 - x - 9)$	$8x^3 - 2x^2 - 18x + 12x^2 - 3x - 27 =$ $8x^3 + 10x^2 - 21x - 27$	☺ ☹ ☠
Writing an expression for the area of a figure		$(2x + 4)(3x + 6) - (2x - 1)(3x - 1)$ $6x^2 + 12x + 12x + 24$ - $(6x^2 - 2x - 3x + 1)$ $29x + 23$	☺ ☹ ☠
Squaring a Binomial	$(2x + 3)^2$	$4x^2 + 12x + 9$	☺ ☹ ☠

Factoring out a GCF	$16q^5 - 21q^4 - 3q$	$q(16q^4 - 21q^3 - 3)$	😊 😐 😞
Factoring a Quadratic Trinomial (with a L.C. of 1)	$t^2 + 9t + 14$	$(t + 7)(t + 2)$	😊 😐 😞
Factoring a Quadratic Trinomial (with a L.C. not 1)	$12t^2 + 5t - 3$	$(4t + 3)(3t - 1)$ <small>+9t -4t</small>	😊 😐 😞
Factoring a Quadratic Trinomial with a GCF	$-4x^2 + 5x + 6$	$-1(4x^2 - 5x - 6)$ $-1(4x + 3)(x - 2)$	😊 😐 😞
Factoring a Difference of Two Squares (D.O.T.S)	$121w^2 - 49$	$(11w + 7)(11w - 7)$	😊 😐 😞
Solving using ZPP	$(2x + 7)(x - 3) = 0$	$2x + 7 = 0$ or $x - 3 = 0$ $x = \frac{-7}{2}$ or $x = 3$	😊 😐 😞
Factoring and Solving using ZPP	$x^2 - 5x = -6$	$x^2 - 5x + 6 = 0$ $(x - 3)(x - 2) = 0$ $x = 3$ or $x = 2$	😊 😐 😞
Factoring (including a GCF) and Solving with ZPP	$-7x^2 + 14x = 0$	$-7x(x + 2) = 0$ $x = 0$ or $x = -2$	😊 😐 😞