

$(2-3x)^2 =$

MATH 1010 ~ Intermediate Algebra Chapter 5: POLYNOMIALS AND FACTORING

Section 5.3: Multiplying Polynomials

Objectives:

- * Use the Distributive Property to multiply polynomials.
- * Use special product formulas to multiply two binomials.
- * Use multiplication of polynomials in application problems.

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

$(2-3x)^2 =$

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

How do we multiply polynomials?

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

b) $(4x^2 - 7)(3x^2 + 2x + 1)$

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

Look for a pattern.

a) $(x - 2)(x + 2)$

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

Look for a pattern.

a) $(4x + 7)^2$

b) $(2x - 3)^2$

Multiply these.

a) $(w + (y + 1))(w - (y + 1))$

b) $(a + b)^3$

Application

Write an expression in terms of x for the perimeter and area of the shaded region.

Determine the value of each if $x = 4\text{cm}$.

