Algebra 2 5.1

Multiply, divide, and simplify monomials and power expressions* *Algebra 1 Ch. 8

Add, subtract, and multiply monomials*

Multiply polynomials*

simplify
degree (of a polynomial)
terms
like terms
distributive property
EWE
FOIL = FAIL

whiteboards
scramble square

p. 304

KeyConcept Simplifying Monomials

A monomial expression is in simplified form when:

- there are no powers of powers,
- each base appears exactly once,
- all fractions are in simplest form, and
- there are no negative exponents.

$(x^2)^3$

no zero exp

$a^3b^{-2} = \frac{a^3}{b^2}$

$a^3b^0 = 1a^3$

$= a^3$

EWE

Example 6 Multiply Polynomials

Find $(n^2 + 4n - 6)(n + 2)$.

n^2+4n-6

$n+2$

$2n^2+8n-12$

n^3+4n^2-6n

$n^3+6n^2+2n-12$

FOIL

$n^3+2n^2-6n-12$

GuidedPractice

Find each product.

6A. $(x^2 + 4x + 16)(x - 4)$

6B. $(2x^2 - 4x + 5)(3x - 1)$ $(x + 2)$

( )

$x+2$

triangle puzzle