Algebra 1 8.3
Multiply binomials using EWE
Multiply polynomials using EWE
distributive property
EWE
~~(FOIL – FAIL)~~
quadratic
~~X~~standard form
X-factor
whiteboards

whiteboards

GuidedPractice

1A. $(3m + 4)(m + 5)$

$$\begin{array}{r} 3m+4 \\ m+5 \\ \hline 15m+20 \\ 3m^2+4m \\ \hline 3m^2+19m+20 \end{array}$$

$7a + 2a$

$9a$

$9a^2$

1B. $(5y - 2)(y + 8)$

FAIL method: Use EWE

Example 2 FOIL Method

Find each product.

a. $(2y - 7)(3y + 5)$

$3x + 5$

$3x - 5$

$-15x \quad -25$

$9x^2 + 15x$

$9x^2 \quad -25$

b. $(4a - 5)(2a - 9)$

GuidedPractice

2A. $(x + 3)(x - 4)$

2B. $(4b - 5)(3b + 2)$

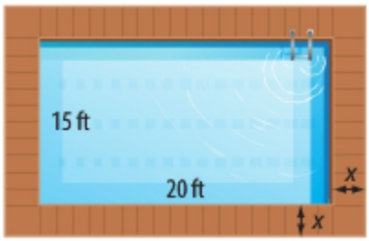
2C. $(2y - 5)(y - 6)$

2D. $(5a + 2)(3a - 4)$

FAIL

Real-World Example 3 FOIL Method

SWIMMING POOL **A contractor is building a deck around a rectangular swimming pool. The deck is x feet from every side of the pool. Write an expression for the total area of the pool and deck.**



Understand We need to find an expression for the total area of the pool and deck.

Example 4 The Distributive Property

Find each product.

a. $(6x + 5)(2x^2 - 3x - 5)$

$2x^2 - 3x - 5$

$6x + 5$

$10x^2 - 15x - 25$

$12x^3 - 18x^2 - 30x$

$12x^3 - 8x^2 - 45x - 25$

$6x + 5$

$2x^2 - 3x - 5$

$-30x - 25$

$-18x^2 - 15x$

$12x^3 - 8x^2$

$12x^3 - 8x^2 - 45x - 25$

b. $(2y^2 + 3y - 1)(3y^2 - 5y + 2)$

GuidedPractice

4A. $(3x - 5)(2x^2 + 7x - 8)$

4B. $(m^2 + 2m - 3)(4m^2 - 7m + 5)$