Algebra 1 8.3

Multiply binomials using EWE

Multiply polynomials using EWE

distributive property

EWE

ewe ~~(EOIL - FAIL)~~

quadratic x^2

standard form -

X-factor

whiteboards

$3x^3+x^2-5x+7$

Quiz 8.1-8.2

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

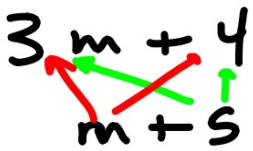
$$\begin{array}{r} 47 \\ \times\ 35 \\ \hline 35 \\ 200 \\ 210 \\ 1200 \\ \hline 1645 \end{array}$$

$$\begin{array}{r} 47 \\ \times\ 5 \\ \hline 35 \\ 200 \\ \hline 235 \end{array}$$

whiteboards

GuidedPractice

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



~~foil~~

ewe

$15m + 20$

$3m^2 + 4m$

$3m^2 + 19m + 20$

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

$5y - 2$

$y + 8$

$40y - 16$

$5y^2 - 2y$

$5y^2 + 38y - 16$

FAIL method: Use EWE

Example 2 [redacted]

Find each product.

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

$$\begin{array}{r} 2y - 7 \\ \times\ 3y + 5 \\ \hline 10y - 35 \\ 6y^2 - 21y \\ \hline 6y^2 - 11y - 35 \end{array}$$

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

GuidedPractice

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

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

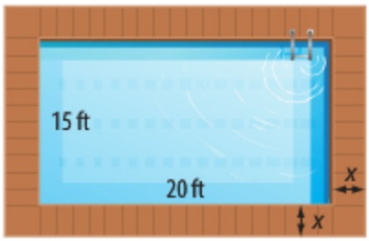
2C. $(2y - 5)(y - 6)$

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

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

GuidedPractice

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

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