

## Advanced Distributive Property

Learning Goal:

By the end of today, we will be able to apply the Distributive property to expressions involving decimals and fractions.

By the end of today, we will be able to apply the Distributive Property to two binomials being multiplied together, and binomials multiplied with trinomials.

Mar 2-9:22 AM

$x^2$

$-x^2$

$x$

$-x$

$x$

$-x$

$-1$

$1$

Expand/Multiply  
(use the dimensions to find the area)  $-2x(2x + 3)$

---

Feb 12-11:53 AM

Expand and Simplify

$$2.5 ( 4x^2 + 8x - 10)$$

Mar 2-9:23 AM

Expand and Simplify

$$0.5x^3 ( 18x^2 + 5x )$$

Mar 2-9:23 AM

Expand and Simplify

$$3x^2(4x + 5)$$

Mar 2-9:23 AM

Expand and Simplify

$$\frac{3}{4}(12x + 8)$$

Mar 2-9:23 AM

Expand and Simplify

$$6(2x + 5a - 7b)$$

Mar 2-9:23 AM

Binomial x Binomial

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

Oct 2-8:31 PM

Expand/Multiply  $(x-3)(x+2)$   
 (use the dimensions to find the area)

The diagram shows a large rectangle divided into several colored sections. At the top left is a blue square labeled  $x^2$ . Below it is a red square labeled  $-x^2$ . To the right of the  $-x^2$  square is a green rectangle labeled  $x$ . Below the green rectangle is a red rectangle labeled  $-x$ . To the right of the  $-x$  rectangle is a green rectangle labeled  $x$ . Below the green rectangle is a red rectangle labeled  $-x$ . To the right of the  $-x$  rectangle is a red square labeled  $-1$ . Below the red square is a yellow square labeled  $1$ .

Feb 12-11:53 AM

Short Cut - First Outside Inside Last (FOIL)

$(x+2)(x+3)$

The diagram shows a grid for the FOIL method. The top row is labeled  $x$  and  $+3$ . The left column is labeled  $x$  and  $+2$ . A vertical dotted line is drawn between  $x$  and  $+3$ . A horizontal dotted line is drawn between  $x$  and  $+2$ .

Oct 2-8:33 PM

Expand the following:

(a)  $(x - 1)(x - 6)$

(b)  $2(x + 5)(2x + 9)$

(c)  $(2x - 3)(4x - 5)$

Oct 2-8:35 PM

Expand the following:

(a)  $(x - 1)(x^2 - 3x + 5)$

(b)  $(2x + 5)(3x^2 + 5x + 1)$

(c)  $2(3x - 1)(-2x^2 + 9x + 7)$

(d)  $(2x - 3)(-x^4 - 5x^3 + x^3 + 3x - 2)$

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

Oct 2-8:35 PM

Homework

Page 95 - 97 #1, 4-6acf, 11ac, 9

Challenge 13, 15

Sep 23-9:38 PM