

Distributive Property:

Example 1:

$$6(3x - 10)$$

$$18x - 60$$

Example 2:

$$x(7x - 2)$$

$$7x^2 - 2x$$

Example 3:

$$-4x(2x - 1)$$

$$-8x^2 + 4x$$

You Try 1:

$$-2(x - 3)$$

$$-2x + 6$$

You Try 2:

$$x(8x + 4)$$

$$8x^2 + 4x$$

You Try 3:

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

$$-3x^2 - 21x$$

Double Distributive Property!!

Example 1:

$$(x + 2)(x + 5)$$

Distribute the x:

$$x^2 + 5x$$

Then distribute the 2: + $2x + 10$

Then COMBINE LIKE TERMS: $x^2 + 7x + 10$

DOUBLE TROUBLE!!

Example 2:

$$(3x - 9)(2x + 4)$$

Distribute the 3x:

$$6x^2 + 12x$$

Then distribute the -9: + $-18x - 36$

Then COMBINE: $6x^2 - 6x - 36$

You Try 1: $(4x - 2)(x + 5)$

$$4x^2 + 20x - 2x - 10$$

$$4x^2 + 18x - 10$$

You Try 3: $(x - 1)(x + 8)$

$$x^2 + 8x - 1x - 8$$

$$x^2 + 7x - 8$$

You Try 2: $(x + 9)(5x - 2)$

$$5x^2 - 2x + 45x - 18$$

$$5x^2 + 43x - 18$$

You Try 4: $(2x - 9)(2x + 9)$

$$4x^2 + 18x - 18x - 81$$

$$4x^2 + 0x - 81$$

$$4x^2 - 81$$