

### step 1

Multiply the **FIRST** terms together.

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

### step 2

Multiply the **OUTER** terms together.

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

### step 3

Multiply the **INNER** terms together.

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

### step 4

Multiply the **LAST** terms together.

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

Example 1:

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

Example 2:

Multiply  $(x + 5)^2$

Example 3:

Multiply  $(2x + 9)(x - 2)$

Example 4:

Multiply  $(8x - 3)(-3x - 1)$

## MULTIPLYING BINOMIALS

### step 1

Multiply the **FIRST** terms together.

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

### step 2

Multiply the **OUTER** terms together.

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

### step 3

Multiply the **INNER** terms together.

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

### step 4

Multiply the **LAST** terms together.

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

Example 1:

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

Example 2:

Multiply  $(x + 5)^2$

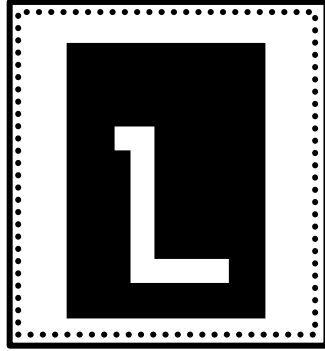
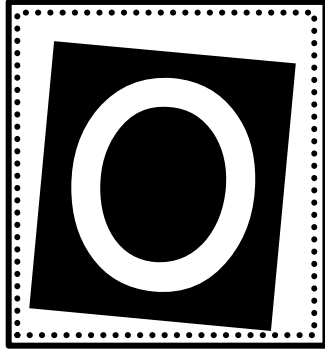
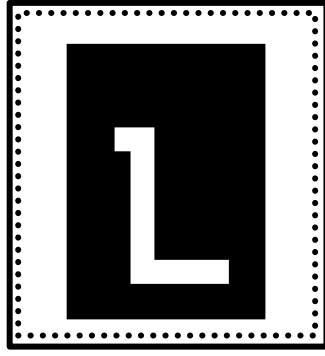
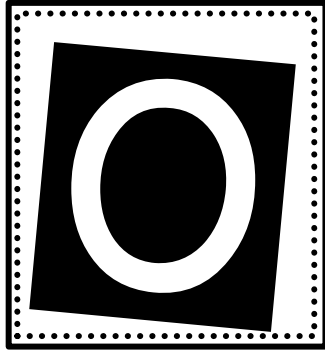
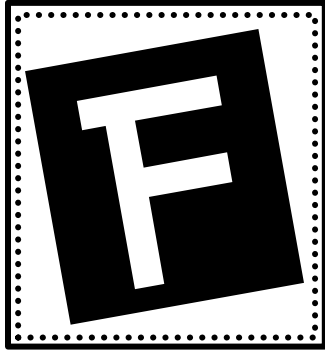
Example 3:

Multiply  $(2x + 9)(x - 2)$

Example 4:

Multiply  $(8x - 3)(-3x - 1)$

## MULTIPLYING BINOMIALS



### step 1

Multiply the **FIRST** terms together.

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

$$6x^2$$

### step 2

Multiply the **OUTER** terms together.

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

$$-15x$$

### step 3

Multiply the **INNER** terms together.

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

$$8x$$

### step 4

Multiply the **LAST** terms together.

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

$$-20$$

Example 1:

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

$$x^2 - 3x + 7x - 21$$

$$x^2 + 4x - 21$$

Example 2:

Multiply  $(x + 5)^2$

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

$$x^2 + 5x + 5x + 25$$

$$x^2 + 10x + 25$$

Example 3:

Multiply  $(2x + 9)(x - 2)$

$$2x^2 - 4x + 9x - 18$$

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

Example 4:

Multiply  $(8x - 3)(-3x - 1)$

$$-24x^2 - 8x + 9x + 3$$

$$-24x^2 + x + 3$$

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Multiply the **FIRST** terms together.

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

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Multiply the **OUTER** terms together.

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

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Multiply the **INNER** terms together.

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

### step 4

Multiply the **LAST** terms together.

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

Example 1:

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

$$x^2 - 3x + 7x - 21$$

$$x^2 + 4x - 21$$

Example 2:

Multiply  $(x + 5)^2$

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

$$x^2 + 5x + 5x + 25$$

$$x^2 + 10x + 25$$

Example 3:

Multiply  $(2x + 9)(x - 2)$

$$2x^2 - 4x + 9x - 18$$

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

Example 4:

Multiply  $(8x - 3)(-3x - 1)$

$$-24x^2 - 8x + 9x + 3$$

$$-24x^2 + x + 3$$

## MULTIPLYING BINOMIALS

## Directions

Step 1: Print pages 1 & 2 front to back (flip along the short edge).

Step 2: Cut in half along the solid line, creating two foldables per page.

Step 3: Have students fold over the top portion so that "F O I L" lies just about "Multiplying Binomials".

Step 4: Have students cut in between each of the four squares, creating four tabs.

The final product should look like this:

