

Expanding two binomials:

- FOIL-Method
- Distributive Property
- Box-Method

Expand:

$$(3b - 5)(2b + 7)$$

Using the
FOIL Method:

$$\begin{array}{cccc} \frac{6b^2}{F} & + \frac{21b}{O} & + \frac{-10b}{I} & + \frac{-35}{L} \\ & & & \\ & = 6b^2 + 11b - 35 \end{array}$$

Expand:

$$(3b - 5)(2b + 7)$$

Using the
Distributive Property:

$$\begin{array}{l} 6b^2 + 21b - 10b - 35 \\ = 6b^2 + 11b - 35 \end{array}$$

Expand:

$$(3b - 5)(2b + 7)$$

Using the
Box Method:

	$2b$	$+7$
$3b$	$6b^2$	$+21b$
-5	$-10b$	-35

$$= 6b^2 + 11b - 35$$

1. $(b + 3)(b + 6)$
 $= b^2 + 9b + 18$

2. $(N - 2)(N - 5)$
 $= N^2 - 7N + 10$

3. $(4c + 9)(3c + 4)$
 $= 12c^2 + 43c + 36$

4. $(5k - 7)(2k - 3)$
 $= 10k^2 - 29k + 21$

Expand

$$(c + 7)(c + 2) = c^2 + 9c + 14$$

	c	$+7$
c	c^2	$+7c$
$+2$	$+2c$	$+14$

Expand

$$(w - 8)(w + 3) = w^2 - 5w - 24$$

	w	$+3$
w	w^2	$+3w$
-8	$-8w$	-24

When the coefficients of **BOTH** variables are 1

The first term is always...first term squared

you can quickly find the middle by.....sum of the constants

The last term is always..... the product of the constants

$$(c + 7)(c + 2) = \boxed{c^2} \boxed{+9c} \boxed{+14}$$

$$(w - 8)(w + 3) = \boxed{w^2} \boxed{-5w} \boxed{-24}$$

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Expand

$$(k + 11)(k - 9)$$

$$\begin{array}{ccc} K^2 & +2K & -99 \\ | & \underbrace{\hspace{1cm}} & \underbrace{\hspace{1cm}} \\ K \cdot K & 11+9 & (11)(-9) \end{array}$$

Expand

$$(b - 6)(b - 8)$$

$$= b^2 - 14b + 48$$

Expand

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

Expand

$$(3m^2 - 5)(2m - 7)$$