

Expanding two binomials:

- FOIL-Method
- Distributive Property
- Box-Method

Expand:

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

F      O      I      L

Using the  
FOIL Method:

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

Expand:

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

Using the  
Distributive Property:

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

Expand:

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

Using the  
Box Method:

$$\begin{array}{c|cc} & 2b & +7 \\ \hline 3b & 6b^2 & +21b \\ -5 & -10b & -35 \end{array}$$
$$= 6b^2 + 11b - 35$$

$$1. (b+3)(b+6)$$

$$= b^2 + 9b + 18$$

$$3. (4c+9)(3c+4)$$

$$= 12c^2 + 43c + 36$$

$$2. (N-2)(N-5)$$

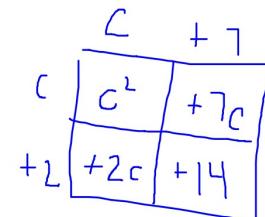
$$= N^2 - 7N + 10$$

$$4. (5k-7)(2k-3)$$

$$= 10k^2 - 29k + 21$$

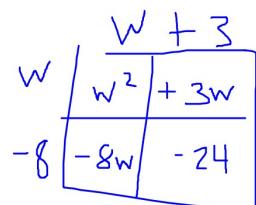
Expand

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



Expand

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



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

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

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



$$\text{Expand } (b - 6)(b - 8) = b^2 - 14b + 48$$

$$\text{Expand } (3m^2 - 5)(2m - 7)$$