How does the "box method" work?

Multiply:

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

Combine like terms. $12x$ and $-8x$ to get $4x$.

$8x^2 + 4x - 12$

first binomial goes here

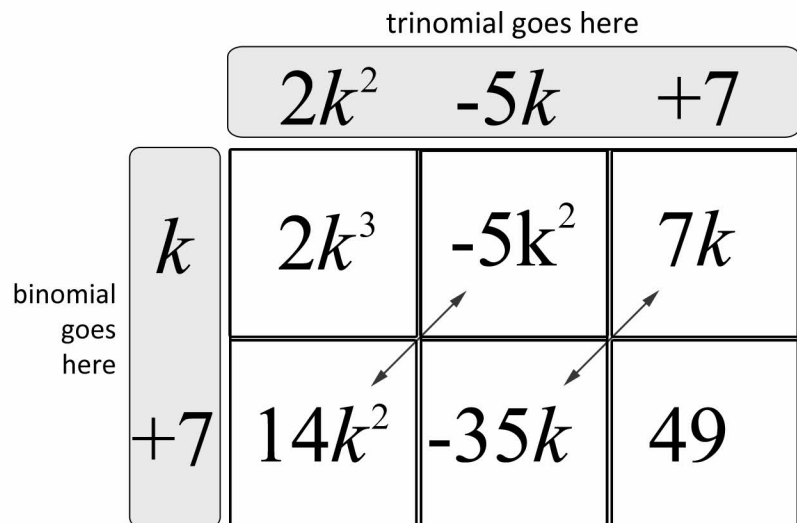|	$2x$	$+3$
$4x$	$8x^2$	$12x$
-4	$-8x$	-12

second binomial goes here
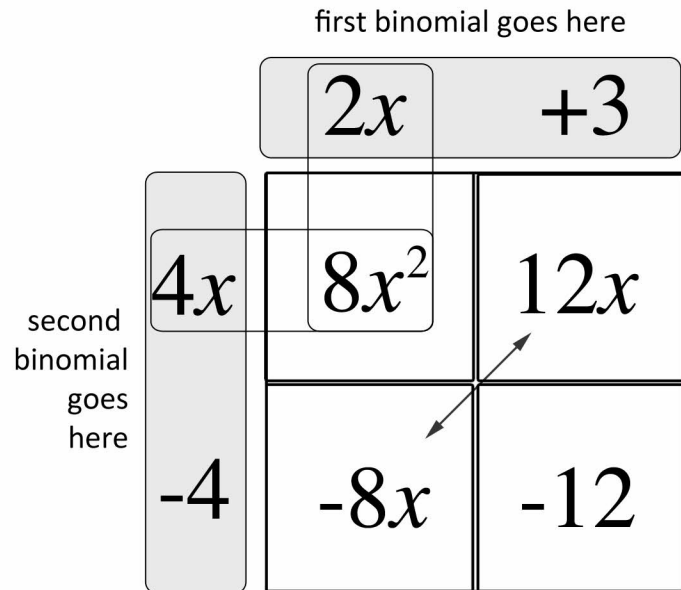
Multiply:

$(k + 7)(2k^2 - 5k + 7)$

Combine like terms.
$14k^2 + (-5k^2) = 9k^2$
$-35k + 7k = -28k$

$2k^3 + 9k^2 - 28k + 49$

trinomial goes here

	$2k^2$	$-5k$	$+7$
k	$2k^3$	$-5k^2$	$7k$
$+7$	$14k^2$	$-35k$	49

binomial goes here

Remember: "like terms" can be added or combined. You may add constants together, example is 4 + 5 these combine to 9. Another example is 2x + 3x, these combine to 5x. The degree of the exponent is important. You cannot combine 2x + 3x³. You may always multiply "non-like" terms, for example, 2x · 5x² = 10x³.