Multiplying Binomials

How do we multiply these two binomials? Do we remember?

$$(2x+3)(3x-7)$$

*Use the distributive property... two arrows over ↷ and two arrows under ↶

A couple of things to remember...

1) multiplying variables... add the exponents. Therefore, $x(x) = x^2$.

2) Don't forget to include the sign in front of both constant values when multiplying.

$(2x+3)(3x-7)$

$6x^2 - 14x + 9x - 21$

$6x^2 - 5x - 21$

Ex) $(x+11)(x-4)$

$x^2 - 4x + 11x - 44$

$x^2 + 7x - 44$

ex) $(-5+4x)^2$

$(4x-5)(4x-5)$

$16x^2 - 20x - 20x + 25$

$16x^2 - 40x + 25$

ex) $(12x+7)(4x+2)$

$48x^2 + 24x + 28x + 14$

$48x^2 + 52x + 14$

*Notice: all answers are left in the form of $ax^2 + bx + c$ ... creates a quadratic expression