Step-by-Step Instructions

- **1.** Introduce concept of multiplying polynomials using **FOIL Acronym Organizer** with FOIL steps filled in to highlight each step in multiplying polynomials.
- **2.** Hand out a paper copy of FOIL Acronym Organizer and highlight each step in multiplying polynomials.
- 3. Following the FOIL method for multiplying two binomials as illustrated below, model talking aloud to entire class how to use a Blank FOIL Acronym Organizer when multiplying polynomials, such as (x + 3)(x + 2).

To solve (x+3)(x+2), use the

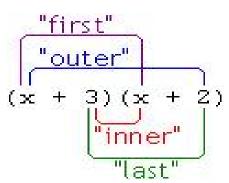
FOIL Strategy –

 $\underline{\mathbf{F}}$ is for the **First** terms x and x, multiply to give x2.

 $\underline{\mathbf{O}}$ is for the **Outside/Outer** terms x and 2, multiply to give 2x.

I is for the **Inside/Inner** terms 3 and x, multiply to give 3x.

 $\underline{\mathbf{L}}$ is for the **Last** terms 3 and 2, multiply to give 6. Then combine terms to give $x^2 + 5x + 6$.



- **4.** Note begin demonstrating how to multiply two binomials before multiplying a binomial with a trinomial.
- **5.** Note color coding the Blank FOIL Acronym Organizer the same colors as the steps of the FOIL method in the FOIL Acronym Organizer when multiplying binomials may assist the students in using the organizer. See <u>Colored Blank FOIL Acronym Organizer</u>.
- **6.** Demonstrate how to solve additional math challenges in front of class with students discussing with you and guiding you on what to do, and write down each step using the Blank FOIL Acronym Organizer.
- 7. Direct students to work with one to two peers filling in the Blank FOIL Acronym Organizer or Colored Blank FOIL Acronym Organizer.
- **8.** Direct students to multiply polynomials individually using Blank FOIL Acronym Organizer or Colored Blank FOIL Acronym Organizer.
- **9.** Have students eventually fade out use of organizer once they can recall FOIL strategy on their own.