Try This 2 – 8

Print and Complete these questions. File them in your binder for future reference.

TT 2. Multiply each expression in the following table by using the distributive property or algebra tiles. An example has been done for you

| Binomial Squared | Expansion | Apply Distributive Property/Algebra Tiles | Product (Perfect Square |
|----------------------|------------------|--|----------------------------|
| (x+1) ² | (x + 1) (x + 1) | $x^2 + 1x + 1x + 1$ | x ² + 2x + 1 |
| (x+3) ² | | | |
| (x -4) ² | | | |
| (2x+5) ² | | | |
| (3x -2) ² | | | |
| (a + b) ² | | | |

Based on the results in the table, answer the following questions. Try to work with a partner for TT 3 to TT 8 if possible.

- **TT 3.** How can you obtain the first term in the product from the first term in the original expression?
- **TT 4.** How can you obtain the last term in the product from the last term in the original expression?
- **TT 5.** How can you obtain the middle term in the product from the original terms in the expression?
- **TT 6.** How can you use your responses to questions TT 3, TT 4, and TT 5 to write a rule to factor the trinomial $4x^2 + 12x + 9$?
- **TT 7.** How can you recognize a perfect square trinomial?

TT8: Generate two other perfect square trinomials. Use descriptions to justify how these examples fit the structure or form of a perfect square trinomial, and show how these can be factored