Names: _____ Date: _____ Period: _____

Discovery activity on special products, part 1

1) Using your algebra tiles, set up and simplify the following two products. Draw your set up after you fill in the square inside the t-table, and then your result after you eliminate your zero pairs.

A) (x + 4)(x – 4)   **B) (2x + 3)(2x – 3)**

Set-up	Set-up
Solution	Solution

2) What changes do you notice from the set-up to the solution?

3) Now, multiply the following binomials without algebra tiles.

C) (x – 10)(x +10)   **D) (4x+7)(4x – 7)**   **E) (-3x+8)(-3x – 8)**

4) What do you notice between the numbers in each pair of binomials?

5) What do you notice between the operations in each of the pairs of binomials?

6) What similarities or differences do you see between the product of binomials with which you started, and your solution after you simplified them?

7) What could be a shortcut that you could use to get from the product of binomials to the solution without having to use the distributive property and combining like terms?

8) Write your answer for #7 in algebraic terms.