Day 3 Multiplying Polynomials (PH 9-3 and 9-4)　　　　Date: _____　Hour: _____

There are many different ways to multiply two binomials. Two of the methods that also work when multiplying polynomials, not just binomials, will be explained here.

Example 1: Multiply $(x + 2)(3x + 5)$

A) **Using the distributive method:**

B) **Using the box method:**

Example 2: Multiply $(3d - 4)^2$

A) **Using the distributive method:**

B) **Using the box method:**

Example 3: Multiply $(6p - 5q)(6p + 5q)$

A) **Using the distributive method:**

B) **Using the box method:**

Example 4: Multiply $(2x - 1)(x^2 + 3x - 8)$

A) Using the distributive method:

B) Using the box method:

In Class Practice: Multiply each of the following. Try each method once and then use the method you prefer to complete the remaining exercises.

1. $(4a - 6b)(2a - 3b)$

2. $(7k + 3)(7k - 3)$

3. $(10w + 1)^2$

4. $(3x + 2)(x^2 - 4x - 5)$

Homework: page 469 #30 – 38, pages 477 – 478 #28 – 31, and #44 – 47 (16 exercises)