Lesson Plan

Grade 9 Academic Math **Lesson: 10**

Unit: Powers and Polynomials **Topic: Adding and Subtracting Polynomials**

- ***homework check:*** ***FCM 11*** **p. 367 1 – 3, 7, 8, 16, 17**

- ***note:*** **Adding and Subtracting Polynomials**

A polynomial is a combination of terms added or subtracted. A single term is called a ***monomial*** and consists of a variable or constant or a combination of both. Two terms separated by an addition or subtraction sign is called a ***binomial*** and three terms combined in the same manner is called a ***trinomial***.

To add or subtract polynomials, we need to know how to collect like terms and use distributive property. Terms are alike when the variables are the same and the exponent on each variable is the same. To collect like terms, we use the sign in front of the term as the operation. For example, simplify each of the following.

a) $5x+2-3x-7=$

$=5x-3x+2-7$

$=2x-5$

b) $-2x^2+3x+5x^2-x=$

$=-2x^2+5x^2+3x-x$

$=3x^2+2x$

c) $3x-5-(-5x+3)=$

$=3x-5+5x-3$

$=3x+5x-5-3$

$=8x-8$

d) $4x^2+2-(3x+5)=$

$=4x^2+2-3x-5$

$=4x^2-3x-3$

- ***homework assignment:*** **NPM 9 p. 109 # 5, 9- 15, 20 – 22**