**ASSIGNMENT (UNIT 1/ DAY 1)**  Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Day 1 – Adding, Subtracting & Multiplying Polynomials

*Part 1: Simplify.*

1. (3x3 + 4x2 + 1) + (2x2 + 10)
2. (-4x2 + 3x – 1) – (4x + 2)
3. (5x + 2)3
4. (4x3 + 5x + 5)(2x + 7)
5. 7 + 2(x + 4)2
6. 3(7x2 + 4) + (x – 5)3

*Part 2: Use your knowledge of polynomial operations to solve the following problems:*

1. If the base of a triangle is given by the expression (5x2 + 4x) and the height of the triangle is given by the expression (x2 + 6x + 5), what is an expression for the area of the triangle, in terms of x?
2. If the radius of a circle is (5x -2) kilometers, write an expression for the area of the circle.