40 pts

Name: _____

Class Day / Time: _____

Due Date: _____

Lab #11 – Assembly - Arithmetic Expression II

In this lab you will write an x86-assembly program to implement the following arithmetic expression:

Result = (Num1 + 28) / (-Num2 * 60) + (-Num3 % 7)

The program will execute the following steps:

1) You will input the **three (3) numbers** from the console and store them in memory. Label the memory locations with the names as in the expression above. Handle the numbers as double words.
2) Create another memory location to store the result and label it as *Result*.
3) Calculate the expression, but do not change the value of the three original numbers in memory. Use **shift/addition method** to implement the constant multiplication. Store the result in memory.
4) Output the result to the console.

Implement the program; test program a number of times with different data. You will need to turn in **three** test runs for the program:

a. using **small positive** numbers (**two** digits numbers)
b. using **small negative** numbers (**two** digits numbers)
c. using combination of **positive and negative larger** numbers (**three** or more digits numbers)

Turn in (STAPLED IN THIS ORDER)

1. The **FIRST PAGE** of this lab as a coversheet
2. The listing of **.asm source code** properly documented
3. The **two** output from the program, either pasted into .asm source code or using print screen