

40 pts

Name: _____

Class Day / Time: _____

Due Date: _____

Lab #5 – Assembly - Arithmetic Expression

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

$$\text{Result} = (-\text{Num1} + \text{Num2}) - \text{Num3}$$

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.
- 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. 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 **two** test runs for each program:

- a. using small numbers (**two** digits numbers)
- b. using 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 and the listing of **.mak file**
3. The **two** output from the program, either pasted into .asm source code or using print screen