CSCI/CMPE 2333 Assembly **Spring 2019** **Mr. Carlos Pena**

Assignment 3

Name _____ SID (last 4 digits only) _____

DIRECTIONS: Complete each problem as described.
IMPORTANT: For full credit, show your work for all problems (this will be worth 50% of your grade) on the back of each page; do not use calculators. Attach additional pages as needed; please label work clearly indicating your name and the assignment number.

A) Fill in the missing number **representations** in the table below. Use the **two's complement** representation to find the **hexadecimal representation**. **Two's complement representations must be in 8 bits; hexadecimal representations must be in 2 hex digits.**

	Decimal	Two's Complement	Hexadecimal
1.	115		
2.	-115		
3.		0101 1110	
4.		1001 0101	
5.			35
6.			C9

B) Perform the following additions in **two's complement**, assuming 8 bits for the representation. Indicate when **overflow** occurs by entering the letter 'O' in the grey box. If there is no overflow, leave the grey box empty.

1.		1110 1000	2.		0011 1100	3.		1100 0101
	+	0100 1111		+	0101 0110		+	1001 1001

4.		0110 0010	5.		0101 1111	6.		1101 1001
	+	0001 1001		+	1001 1001		+	1011 0110

Grading Criteria

You start with 100 points and then lose points according to the following criteria:

1. There is no answer nor work shown for the problem: -6 points
2. Answer is incorrect, work is correct: -1 points
3. Answer is correct, work is incorrect: -2 points
4. Answer is incorrect, work is incorrect: -2 points
5. Answer is correct, no work: -3 points