Name: Id#

COE 200, Term 023 Fundamentals of Computer Engineering

Quiz# 2

Date: Saturday, July 12, 2003

- **Q1.** Consider the following two numbers A=-98 and B=33:
 - a. Express the two numbers in **Sign-Magnitude**, **1's complement** and **2's complement** notations, assuming **8-bit representation**.

b. Perform the operation **A-B** two times, once using **1's complement notation** and once using **2's complement notation**.

Q2. Determine, in <u>binary</u> and <u>decimal</u> , the smallest (negative) number and the largest (positive) number that can be stored using Sign-Magnitude , 1's Complement and 2's complement notations, assuming 12-bit representation.
notations, assuming 12 bit representation.