

Signature _____

Name _____

cs30x _____

Student ID _____

Score: _____

Quiz 1
CSE 30
Fall 2003

#1. Show the representation of -483_{10} in the following representation schemes (assume 16-bit words):

a) sign magnitude

b) one's-complement

c) two's complement

#2. Convert 548_{10} into (assume 16-bit words):

a) binary

b) octal

c) hexadecimal

#3. Fill in the CCR bits for the following addition instructions (8-bit two's-complement numbers):

10101010
+ 10011001

01001011
+ 01010101

N Z V C

| | | |

N Z V C

| | | |

(over)

#4. Powers of 2

$$256K = 2\text{---}$$

$$2^{35} = \text{---} \quad (\text{in terms of K, M, G, etc.})$$

#5. List the order of the stages of the compilation process discussed in class:

A - ld (Linkage Editor)

B - as (assembler)

C - cpp (C Preprocess)

D - exe/a.out (executable image)

E - ccomp (C Compiler)

% cc/gcc file.c --> _____ --> _____ --> _____ --> _____ --> _____