

Signature _____

Name _____

Student ID _____

cs30x _____

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**Quiz 1
CSE 30
Fall 2004**

#1. Show the representation of -420_{10} in the following representation schemes (assume 16-bit words):

a) sign magnitude

b) one's-complement

c) two's complement

#2. Convert 305_{10} into (assume 16-bit words):

a) binary

b) octal

c) hexadecimal

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

11110110
+ 00001010

10101010
+ 10011001

N	Z	V	C

N	Z	V	C

(over)

#4. Powers of 2

$$512K = 2^{\text{---}}$$

$$2^{21} = \text{---} \quad (\text{in terms of K, M, G, etc.})$$

#5. List two examples of systems/programs/devices that use a Stack Architecture (as discussed in class):

1)

2)

The SPARC Architecture is an example of a _____ architecture. The only group of instructions that touch memory are _____ and _____.