Name:
cs30x____
Score:

Quiz 1
CSE 30
Fall 2001

#1. Show the representation of $-\mathbf{440}_{\mathbf{10}}$ in the following representation schemes (assume 16-bit words):

a) sign magnitude

b) one's-complement

c) two's complement

#2. Convert $\mathbf{513}_{\mathbf{10}}$ 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):

```
  00110111
+ 01001010
----------
```

N	Z	V	C

```
  10110001
+ 01010111
----------
```

N	Z	V	C

(over)

#4. Powers of 2

256M = 2——

2^{17} = _____ (in terms of K, M, G, etc.)

#5. In a Little-Endian architecture, show how the bytes are laid out in memory for the following statement (write the hexadecimal values of the bytes in the appropriate memory locations):

```
long fellow = 0x62833826;
```