

# HW 2

## Bits and Bytes

Name: \_\_\_\_\_ Time spent: \_\_\_\_\_ min

1) Choose the best identifier for each binary element in blue. 30 pts

(X in the box)

A: 10010110

B: 10010110

C: 10010110

D: 10010110

E: 10010110

F: 1001011011110000

G: 1001011011110000

Bit(s)	Nibble	Byte

2) Provide the bit value(s) for each item.

30 pts

(1 or 0 or ?)

Num = 10010110

Num[3]

Num

Num[8]

Num[4-2]

Num[5,3,1]

Num[7-6,2-0]


3) Convert each number from KMG  $\leftrightarrow$   $2^n$  format (show your work – like the notes) 40 pts

16K  $\rightarrow$   $2^{\text{---}}$

8M  $\rightarrow$   $2^{\text{---}}$

2G  $\rightarrow$   $2^{\text{---}}$

$2^4$   $\rightarrow$   $\text{---}$

$2^{13}$   $\rightarrow$   $\text{---}$

$2^{20}$   $\rightarrow$   $\text{---}$