Name:

Date:

Class: CS 160

Quiz #2

1) Convert the following binary numbers to decimal. (Three Points)

1. 000010012 =
2. 000000112 =
3. 000101002 =

2) Convert the following decimal numbers to **binary** (use 8 place holders; ex: 00000000 or 11111111). (Three Points)

1. 710 =
2. 11810 =
3. 2210 =

3) Convert the following decimal to its binary equivalent using **two’s complement**. (Eight Points)

1. 710 =
2. 310 =
3. -510 =
4. -810 =

4) Add the following binary numbers using **regular binary** (Answers in ***8-bit binary***). (Three Points)

1. 000100002 + 000011112 =
2. 110010112 + 001000012 =
3. 101100002 + 000100112 =

5) Rotate the following binary numbers. (Three Points)

1. 11102 left(2) =
2. 01102 right(1) =
3. 00012 right(3) =

EC) Complete the following operations using logic gates to get the final solution. (Four Points)

1. 01101

AND 11101

1. 00110

OR 01011

1. Answer from **A**

XOR Answer from **B**