

Student Honor Pledge:

All work submitted is completed by me directly without the use of any unauthorized resources or assistance (February 9th @ 5:30 pm)
 Initials: _____

Quiz 2

PROBLEM 1 (40 PTS)

- Complete the following table:

REPRESENTATION			
Decimal	Sign-and-magnitude	1's complement	2's complement
	11010		
			0110
		1010	
-7			

- Convert the following decimal number to its 2's complement representation: -7.75 (5 pts)

PROBLEM 2 (20 PTS)

- Perform the following operation in the 2's complement system, i.e., provide the summands and the result in 2's complement representation (indicate the carries). Use the minimum number of bits to represent both the summands and the result so that the overflow bit is 0.
 ✓ -14 + 21

PROBLEM 3 (40 PTS)

- Complete the timing diagram of the circuit shown below: $y = y_3y_2y_1y_0$, $x = x_1x_0$

