

CSE 370 – Introduction to Digital Logic Design
Spring 2010
Quiz 1

For maximum credit, show all your work.

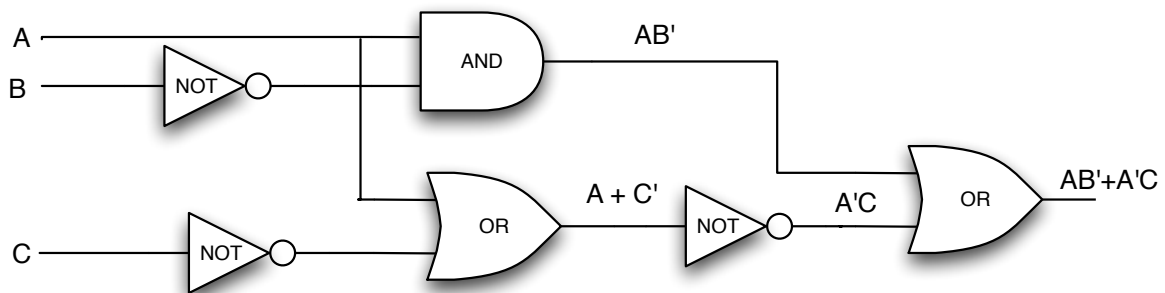
1. The following is an 8-bit 2's complement binary number. What is the decimal representation of this number?

$$100100011 \quad -256 + 32 + 2 + 1 = -221$$

2. What is the 8-bit 2's complement binary number for the decimal number 17?

$$00010001$$

3. Fill in the truth table for the function computed by the following circuit.



A	B	C	f(A,B,C)
0	0	0	0
0	0	1	1
0	1	0	0
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	0
1	1	1	0