

(NAND-NAND and NOR-NOR)

1 (Modified Problem 36, page 44 of Dr. Eccles' book)

(a) Design minimal NAND-NAND logic to produce $X=1$ if the binary number $AB > CD$, $Y=1$ if $AB=CD$.

(b) Design minimal NOR-NOR logic to produce $Z=1$ if $AB < CD$.

	ABCD	X	Y	Z
0	0000			
1	0001			
2	0010			
3	0011			
4	0100			
5	0101			
6	0110			
7	0111			
8	1000			
9	1001			
10	1010			
11	1011			
12	1100			
13	1101			
14	1110			
15	1111			

