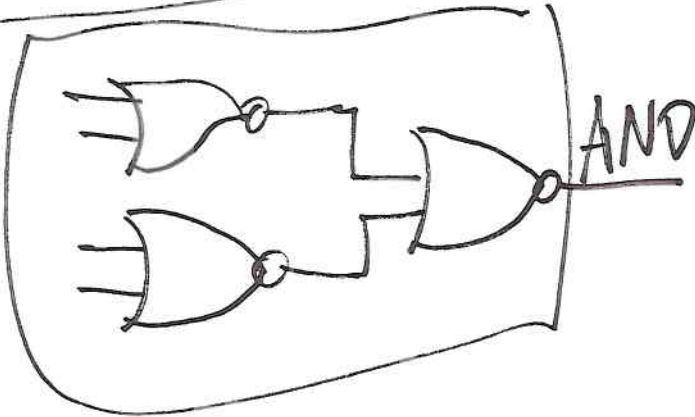
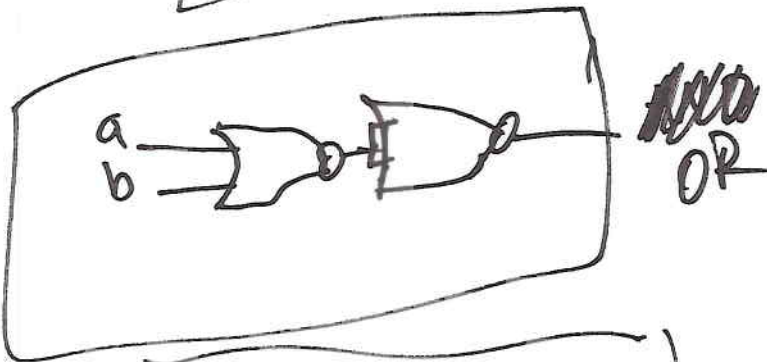
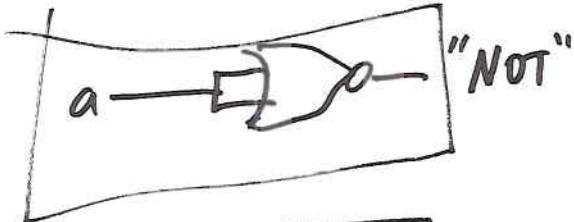


①

"Completeness of a NOR"



a	b	NOR
0	0	1
0	1	0
1	0	0
1	1	0

NOR	
a	'NOT'
0	1
1	0

a	b	XOR	NOT	NOR
0	0	0	1	0
0	1	1	0	1
1	0	1	0	1
1	1	1	0	1

		[Goal]			
a	b	AND	a'	b'	NOR
0	0	0	1	1	0
0	1	0	1	0	0
1	0	0	0	1	0
1	1	1	0	0	1

Digital Design

2015-10-01

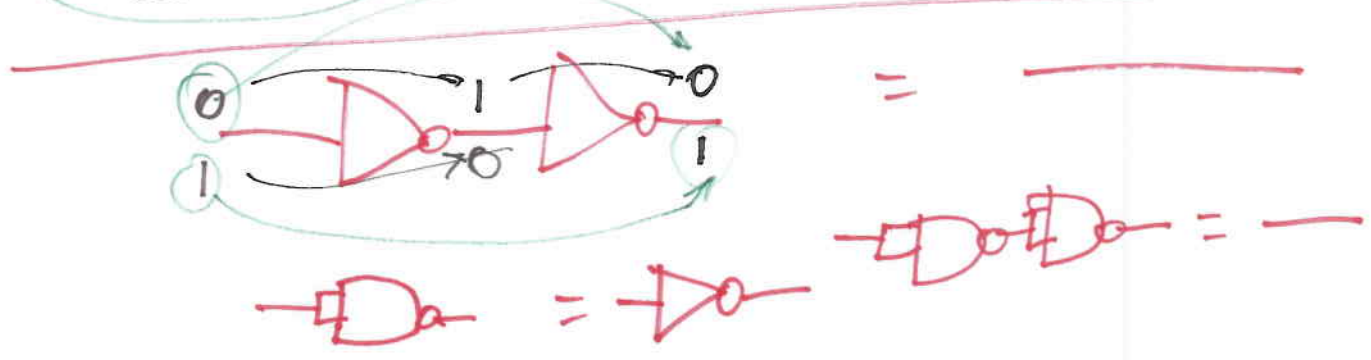
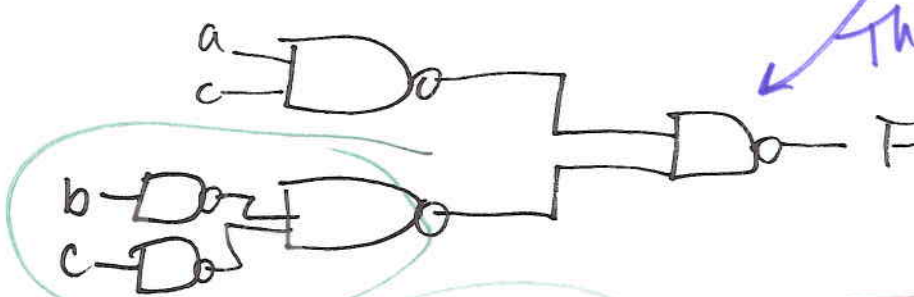
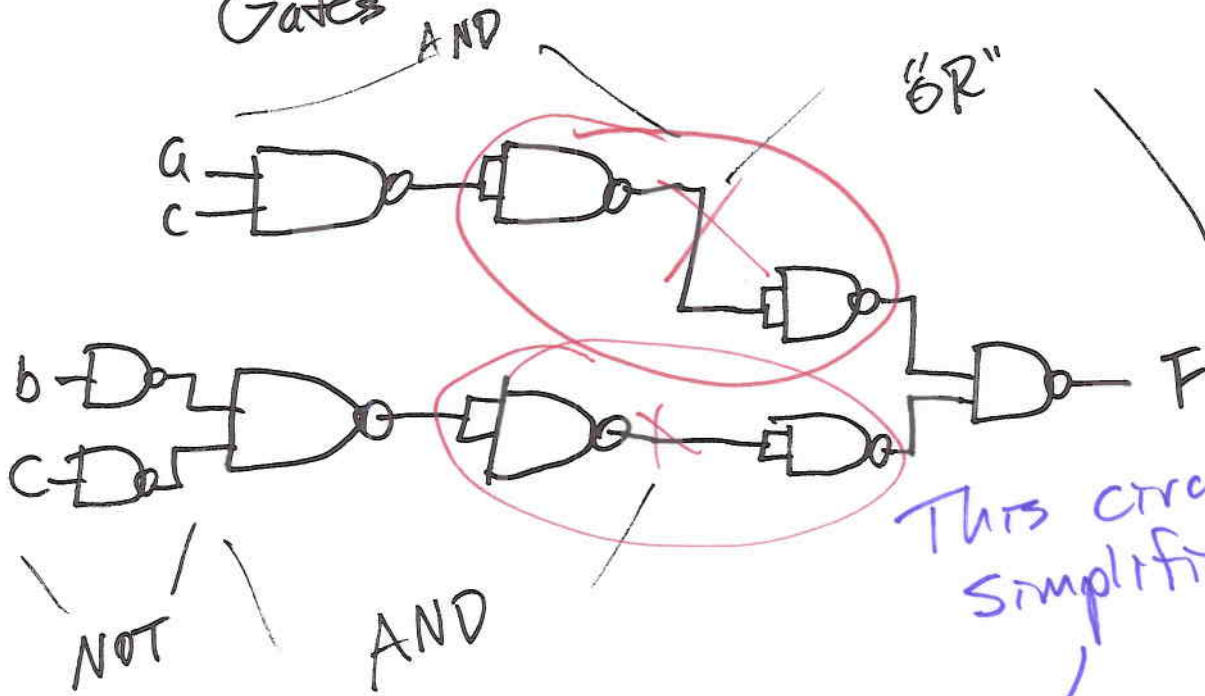
(2)

$$F(a,b,c) = ab' + ac + b'c'$$

$$= ac + b'c'$$

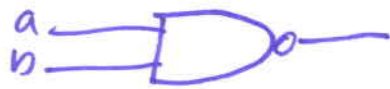
Do IN NAND
Gates

a \ bc	00	01	10	11
0	1			
1	1	1	1	

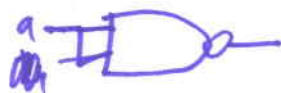


(3)

"Completeness of NAND"



a	b	NAND
0	0	1
0	1	1
1	0	1
1	1	0



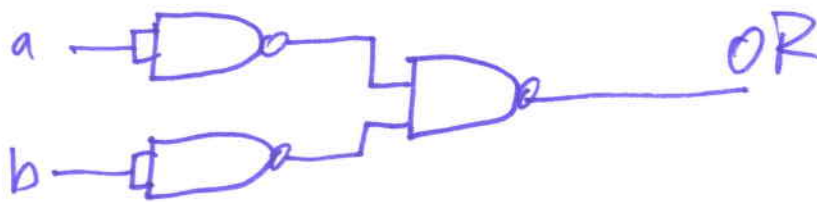
NOT

a	'NOT'
0	1
1	0



AND

a	b	1st NAND	2nd NAND
0	0	1	0
0	1	1	0
1	0	1	0
1	1	0	1



OR

ab	a'	b'	Last NAND
00	1	1	0
01	1	0	1
10	0	1	1
11	1	1	1