

1) ab

	00	01	11	10
00			1	1
01				
11			1	1
10				

a) $a\bar{c}\bar{d} + b\bar{c}\bar{d} + acd + bcd$

cos 4:21

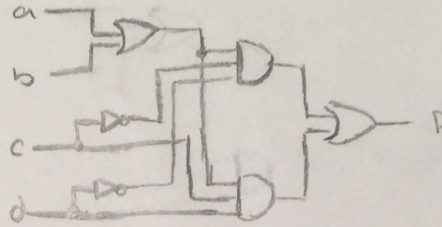
b) $(\bar{a} + \bar{b})(\bar{c} + d)(c + \bar{d})$

cos 4:13

c) $a\bar{c}\bar{d} + b\bar{c}\bar{d} + acd + bcd$

$\bar{c}\bar{d}(a+b) + cd(a+b) \rightarrow$

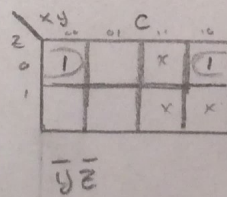
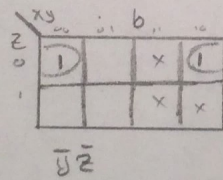
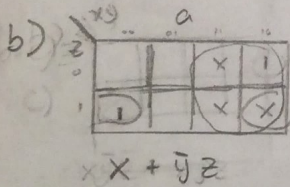
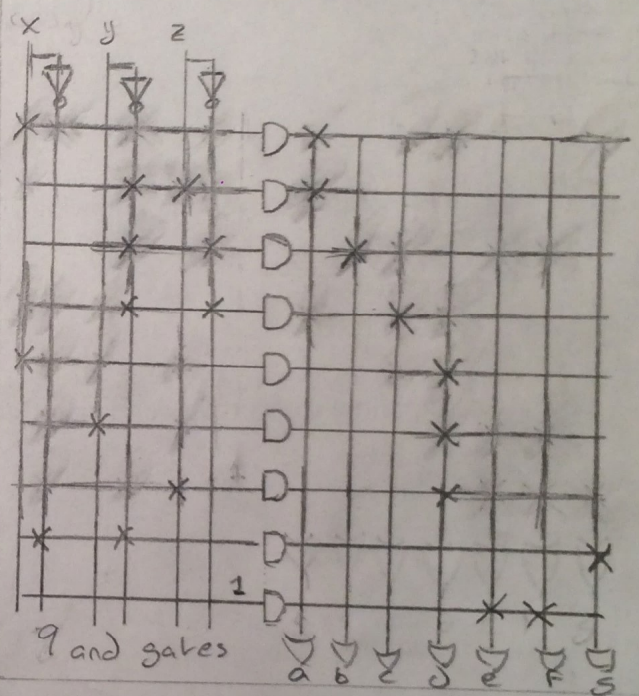
$(\bar{c}\bar{d} + cd)(a+b)$



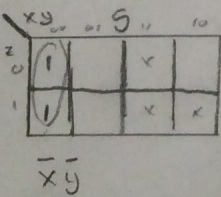
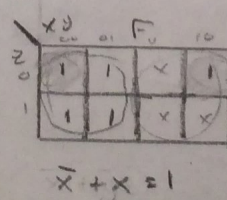
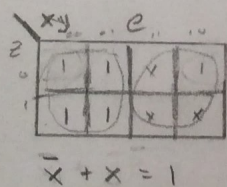
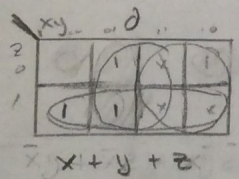
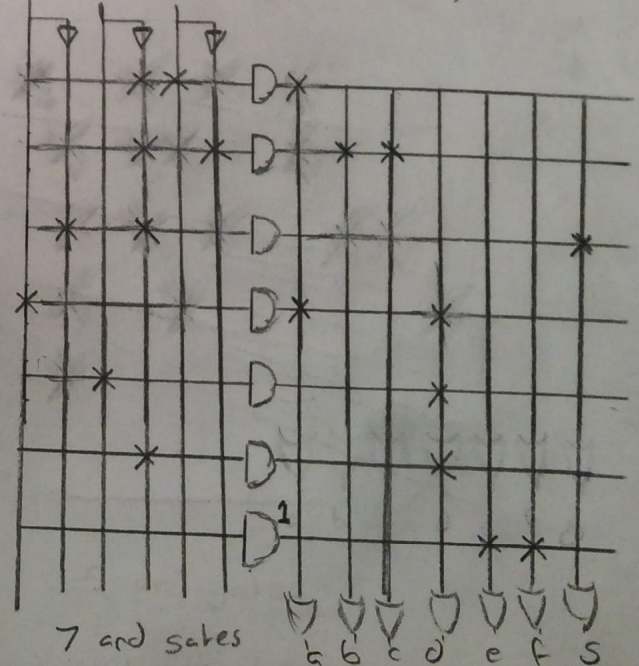
2)

	x	y	z	a	b	c	d	e	f	g
0	0	0	0	0	1	1	0	1	1	0
0	0	1	1	1	0	0	1	1	1	1
0	1	0	0	0	0	0	1	1	1	0
0	1	1	1	0	0	0	1	1	1	0
1	0	0	0	1	1	1	1	1	1	0
1	0	1	1							
1	1	0	0							
1	1	1	1							

(contd.)



(contd.)



c) $\bar{x} + \bar{y}z + \bar{y}z + \bar{y}z + x + y + z + \bar{x}y + 1$

d) $\bar{y}z + \bar{y}z + \bar{x}y + x + y + z + 1$

1)

Dec	Bin	Hex
7	111	7
17	10001	11
199	11000111	C7
255	11111111	FF

2)

Bin	Dec	Oct	Hex
1011010011	723	1323	2D3
101011010	346	532	15A
1000010	66	102	42

3)

Hex	Oct	Dec
20	40	32
F1	361	241
400	2000	1024

4)

Hex	Bin
7F	1111111
BCD	101111001101
F1E91	11110001111010010001

5)

Oct	Bin
14	1100
145	1100101