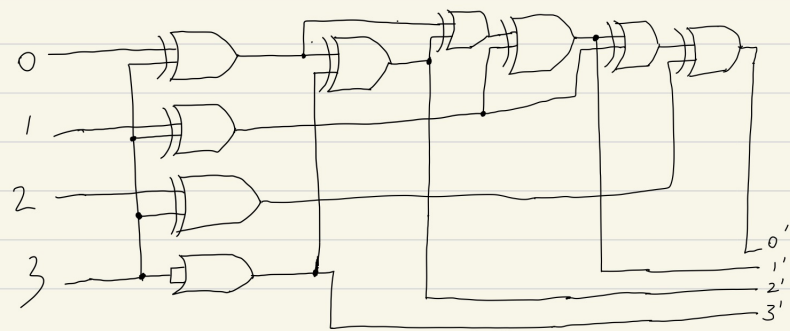


Q_1



input			output	
			ABC	
Q2,	0	$\begin{matrix} x & y & z \\ 0 & 0 & 0 \end{matrix}$	1	001
	1	001	2	010
	2	010	3	011
	3	011	4	100
	4	100	2	010
	5	101	3	011
	6	110	4	100
	7	111	5	101

A

	00	01	11	10
0	0	0	1	0
1	0	0	1	0

$$A = yz + xy$$

B

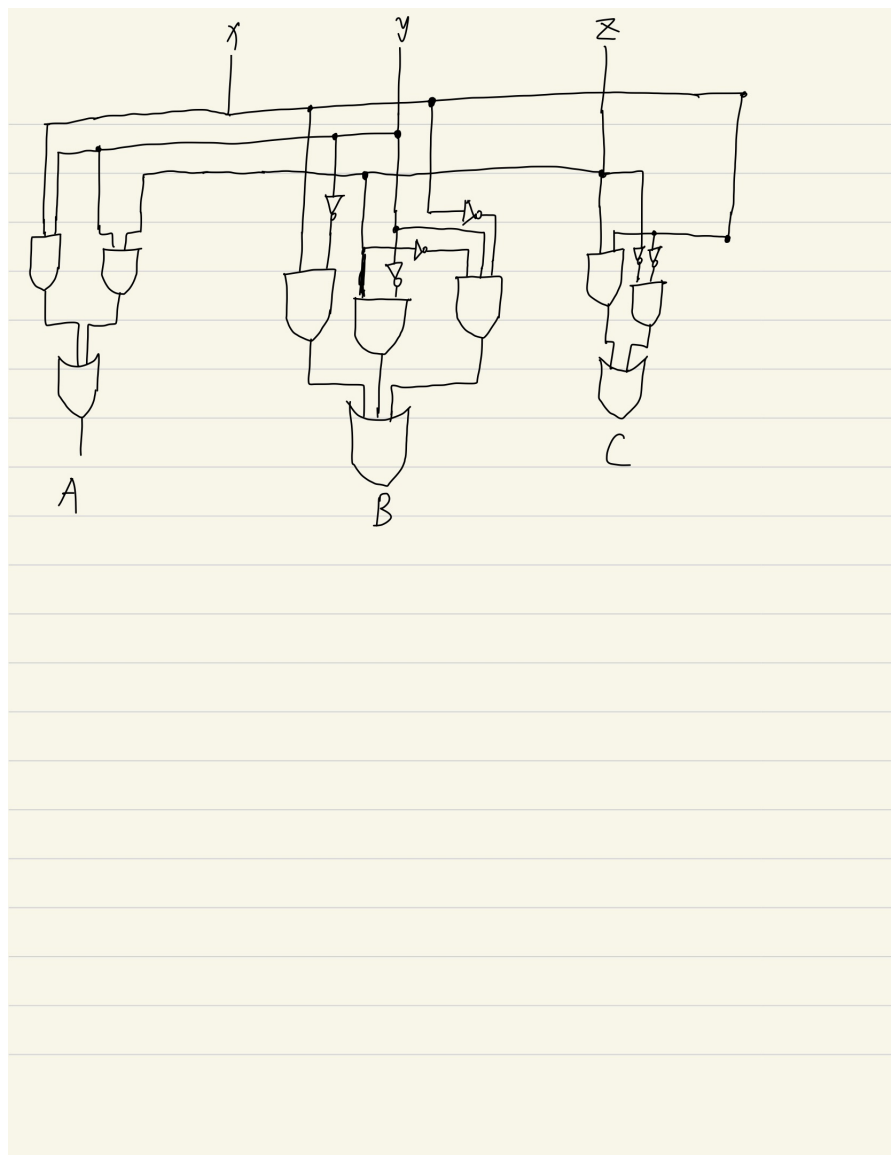
	00	01	11	10
0		1		0
1	1	1		

$$B = x'yz' + y'z + xy'$$

C

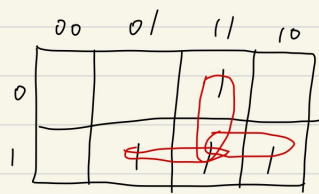
	00	01	11	10
0	1			1
1		1	1	

$$C = xz + x'z'$$

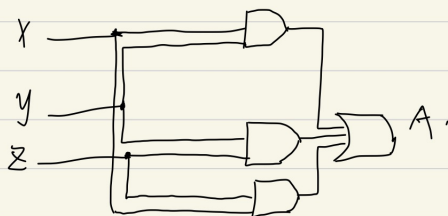


Q3, input

x	y	z	output A
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	1
1	1	1	1



$$A = xz + yz + xy$$



Q4, input output

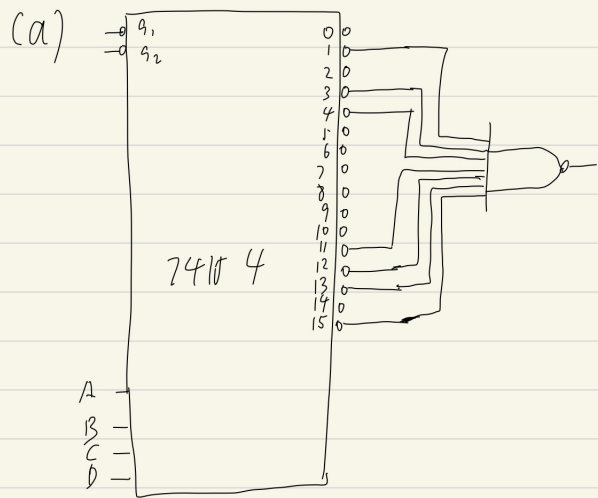
	A	B	C	
I_0	0	0	0	D
I_1	0	0	1	0
I_2	0	1	0	0
I_3	0	1	1	1
I_4	1	0	0	D
I_5	1	0	1	1
I_6	1	1	0	D'
I_7	1	1	1	0

	00	01	11	10
A=0	D	0	D	0
A=1	D	D	0	D'

Hence the Boolean expression is

$$f(A, B, C, D) = B'C'D + AB'C + A'BC + ABC'D'$$

Q5.



(b),