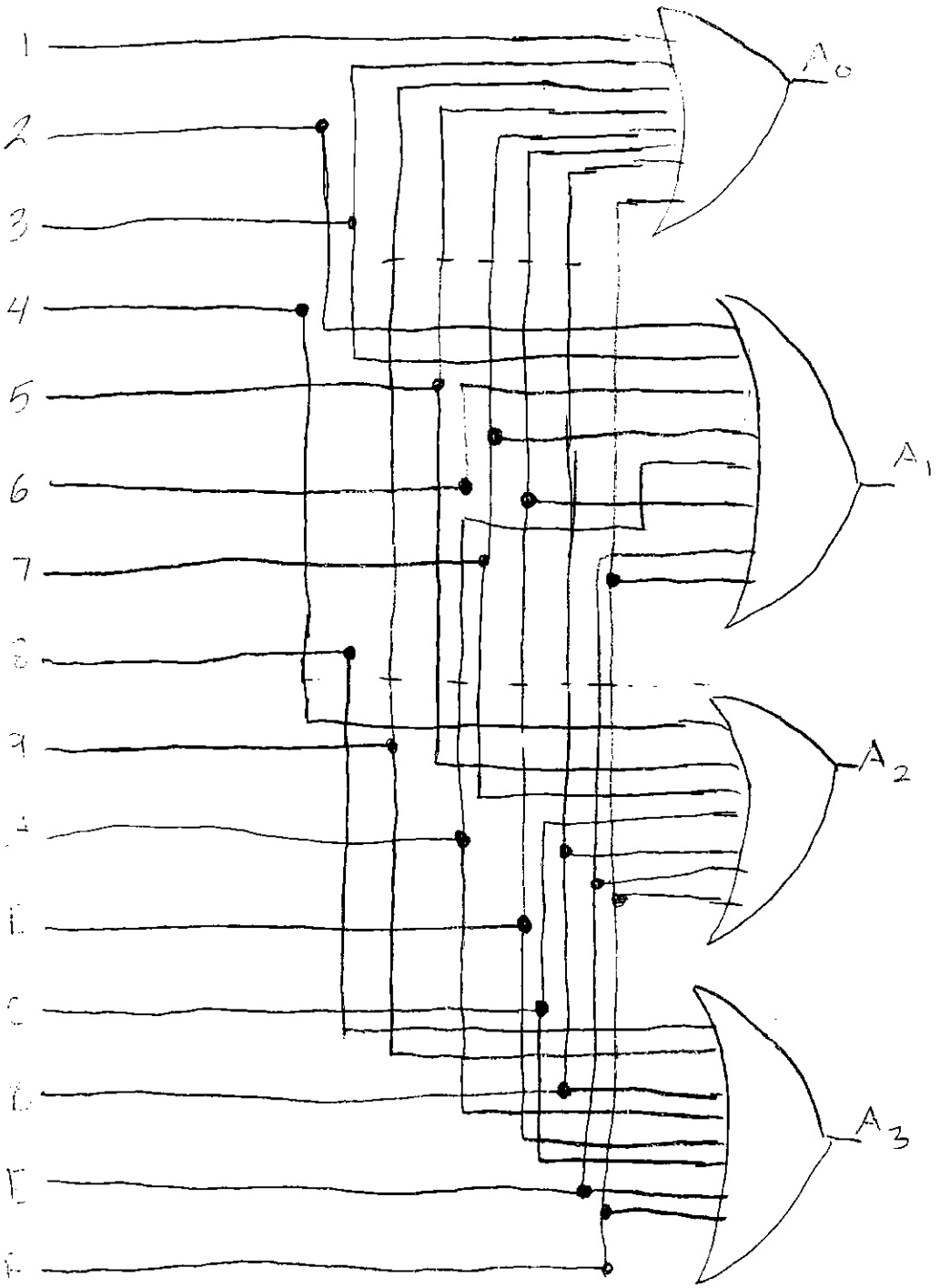
1.

		$A_{\#3}$	$A_{\#2}$	$A_{\#1}$	$A_{\#0}$
0		0	0	0	0
1		0	0	0	1
2		0	0	1	0
3		0	0	1	1
4		0	1	0	0
5		0	1	0	1
6		0	1	1	0
7		0	1	1	1
8		1	0	0	0
9		1	0	0	1
10	A	1	0	1	0
11	B	1	0	1	1
12	C	1	1	0	0
13	D	1	1	0	1
14	E	1	1	1	0
15	F.	1	1	1	1

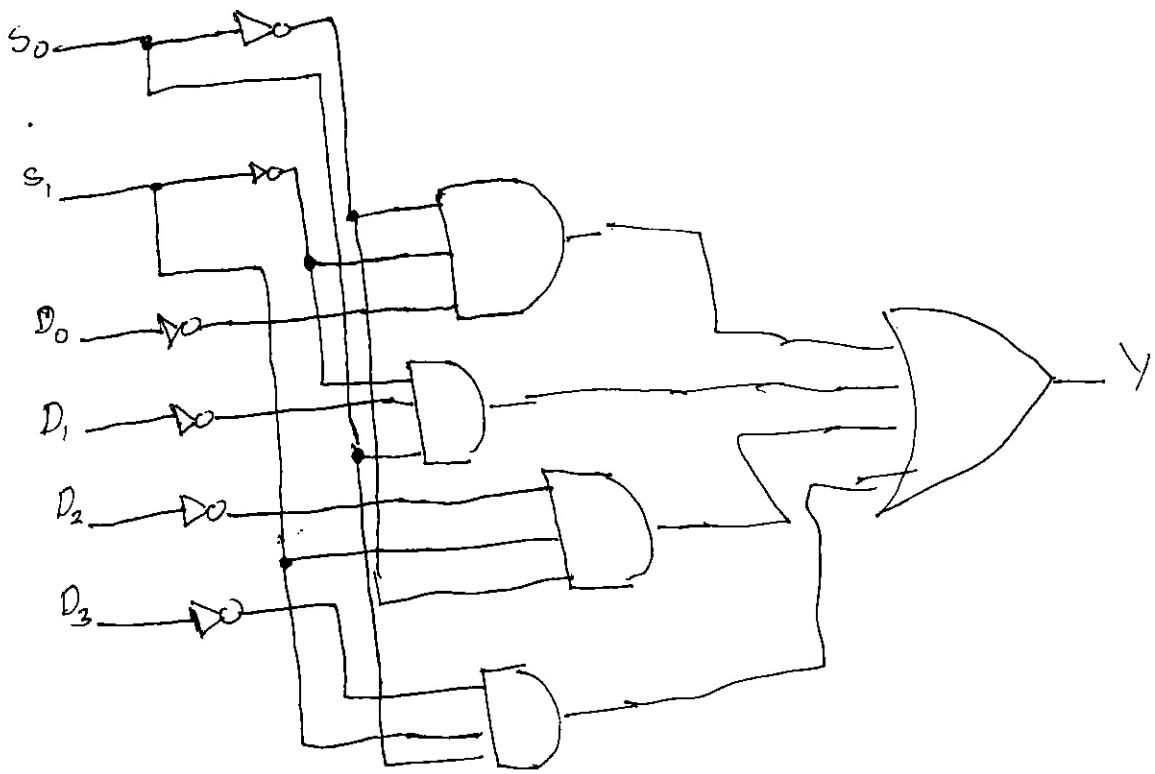
* logic diagram is on different page

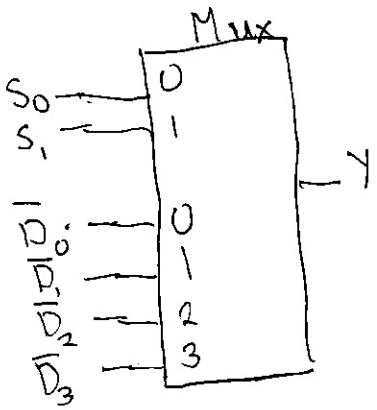
2.

The faulty is 64; the type of failure is shorted

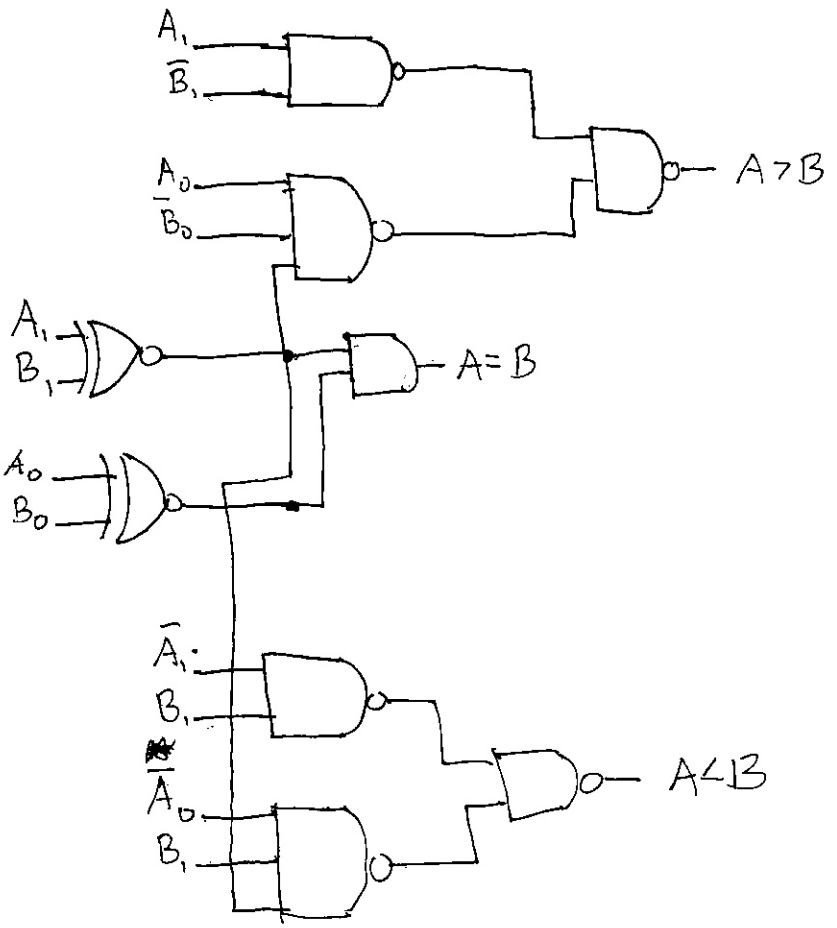

1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
A_0
A_1
A_2
A_3

1.


S_0
S_1
D_0
D_1
D_2
D_3
Y


Mux
S_0
S_1
$\overline{D}_0$
$\overline{D}_1$
$\overline{D}_2$
$\overline{D}_3$
0
1
0
1
2
3
Y

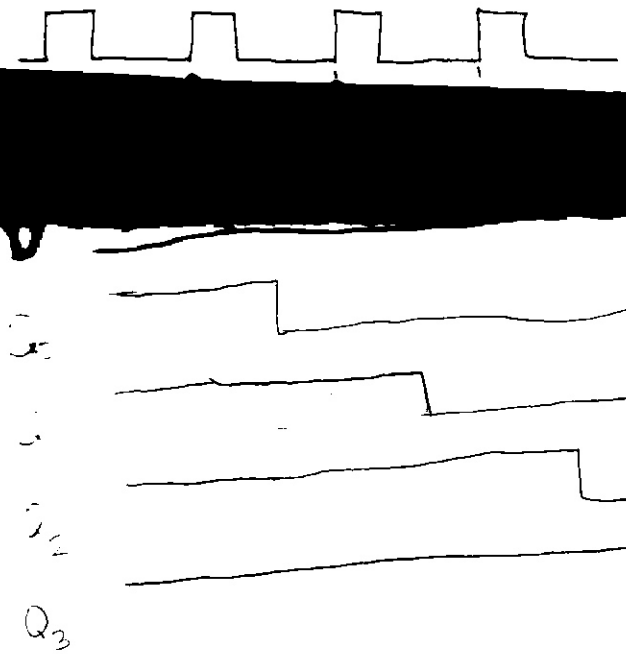
2.



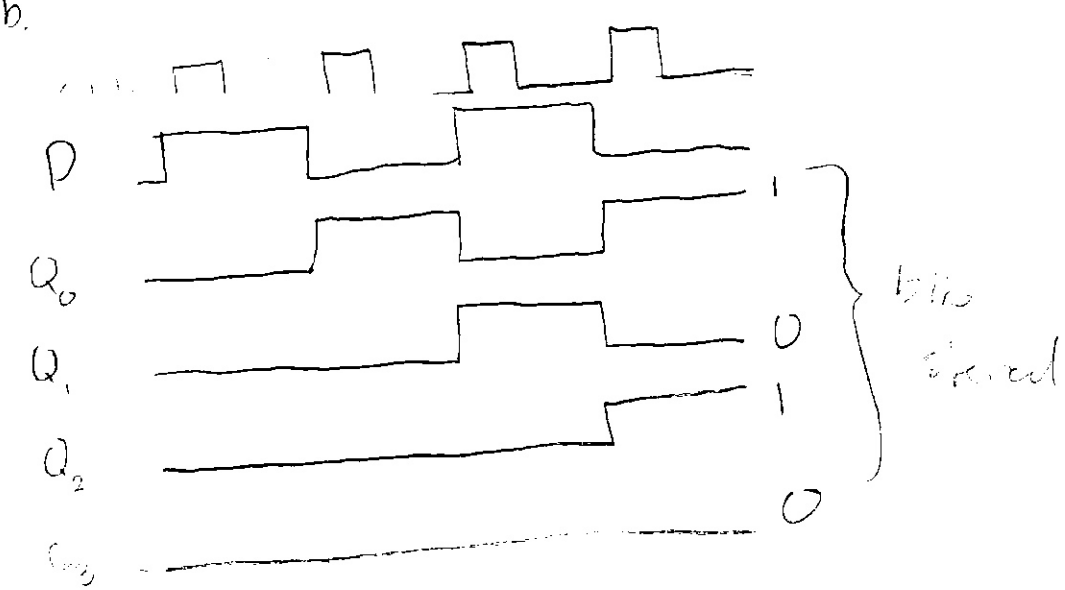
Ch. 7

1.

a.



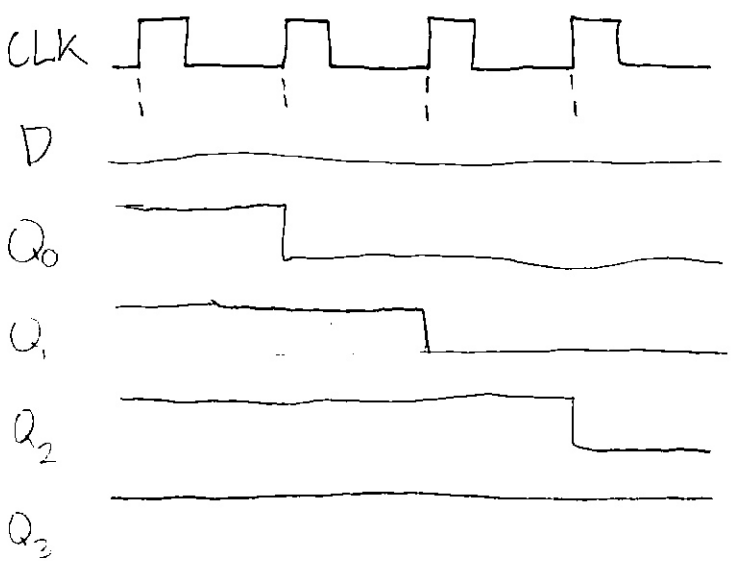
b.



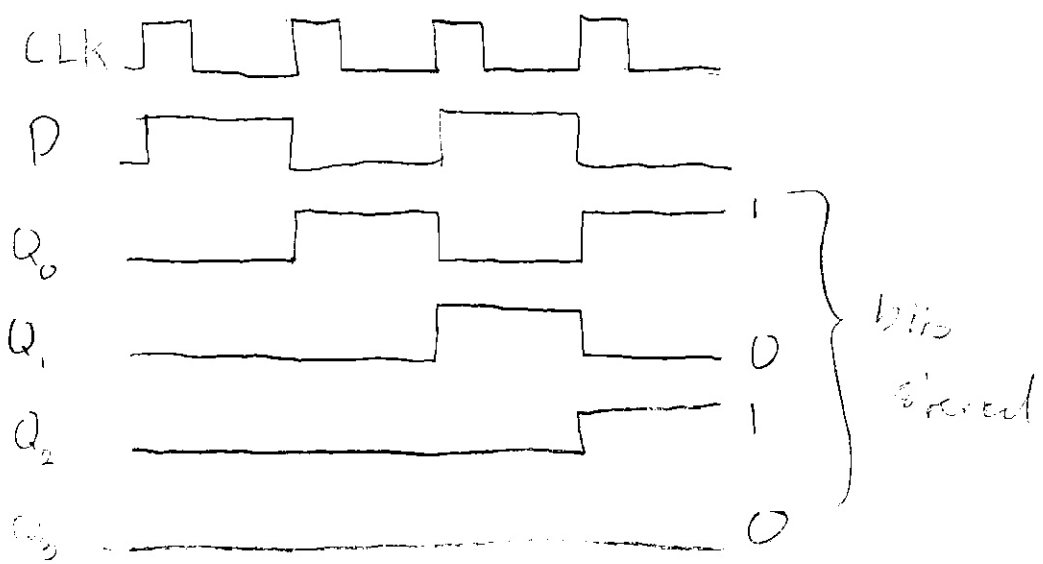
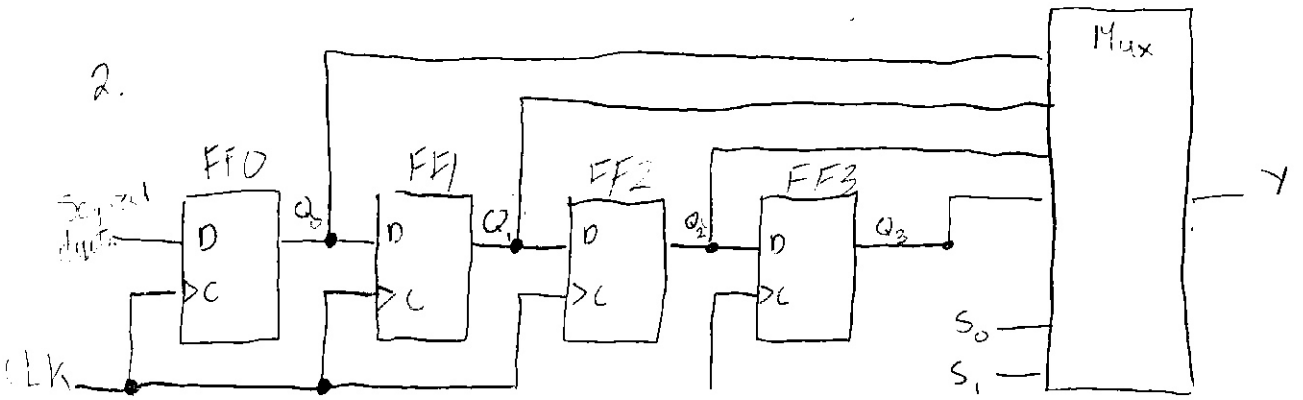
Ch. 7

1.

a.



b.



2.