

CSE 206
Online 8

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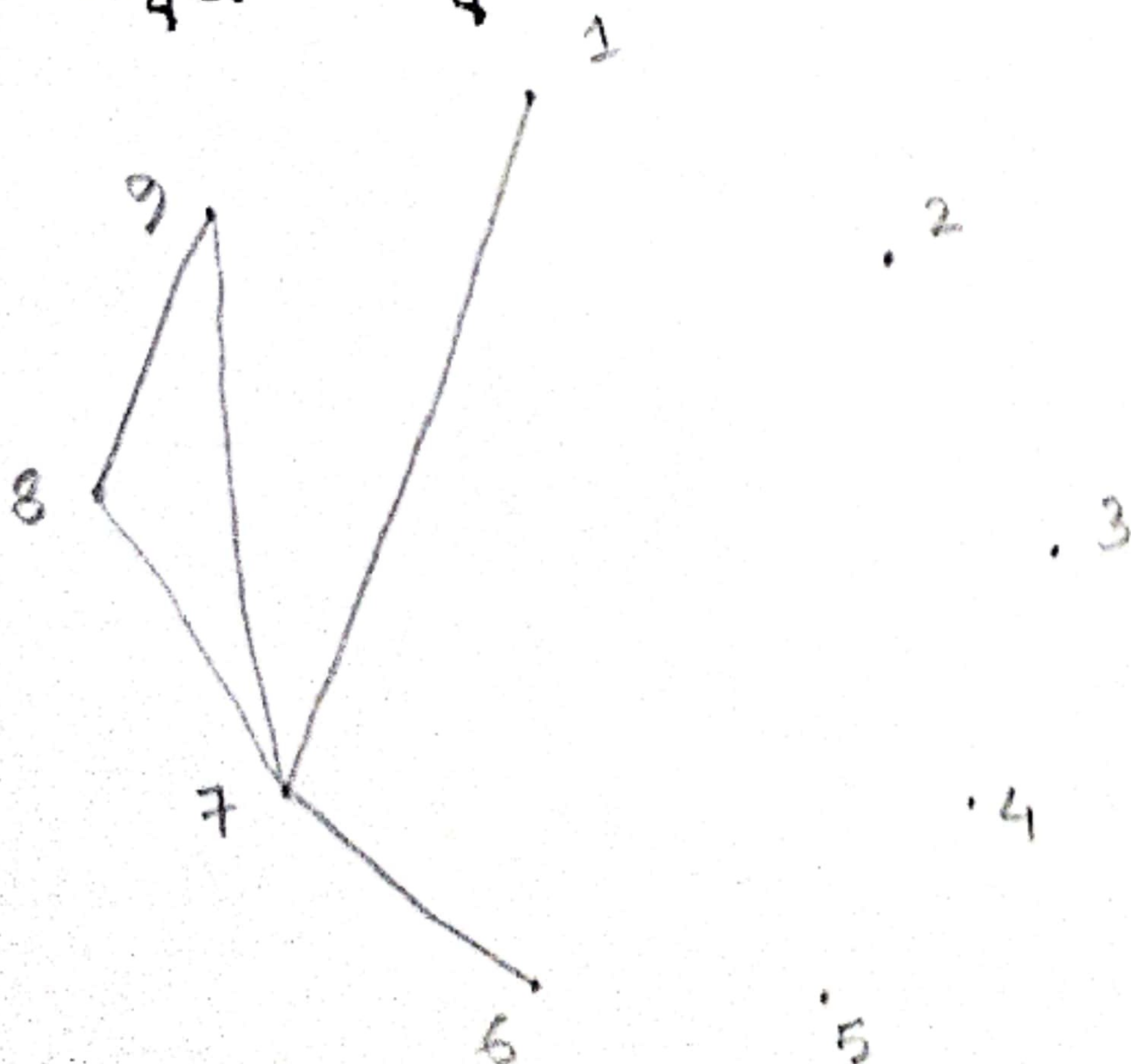
Primitive Flow Table:

	00	01	11	10
1	①/0	7/0	- -	2/0
2	3/0	- -	8/0	②/0
3	③/0	4/0	- -	9/0
4	5/0	④/0	8/0	- -
5	⑤/0	7/0	- -	6/d
6	1/d	4 - -	8/0	⑥/1
7	1/0	⑦/0	8/0	- -
8	- -	7/0	⑧/0	9/0
9	1/0	- -	8/0	⑨/0

2	1-3							
3	4-7	2-9	2-9					
4	1-5	4-7	3-5	3-5				
5	2-6	3-5	2-6	4-7	4-7			
6	X	X	X	1-5	1-5			
7	✓	1-3	1-5	1-5	1-5	✓		
8	2-9	2-9	4-7	4-7	6-9	X	✓	
9	2-9	1-3	1-3	X	5-9	X	✓	✓
	1	2	3	4	5	6	7	8

Closed covering:
{(1)(2)(3)(4)(5)(6)(789)}
a b c d e f g

Merger diagram:

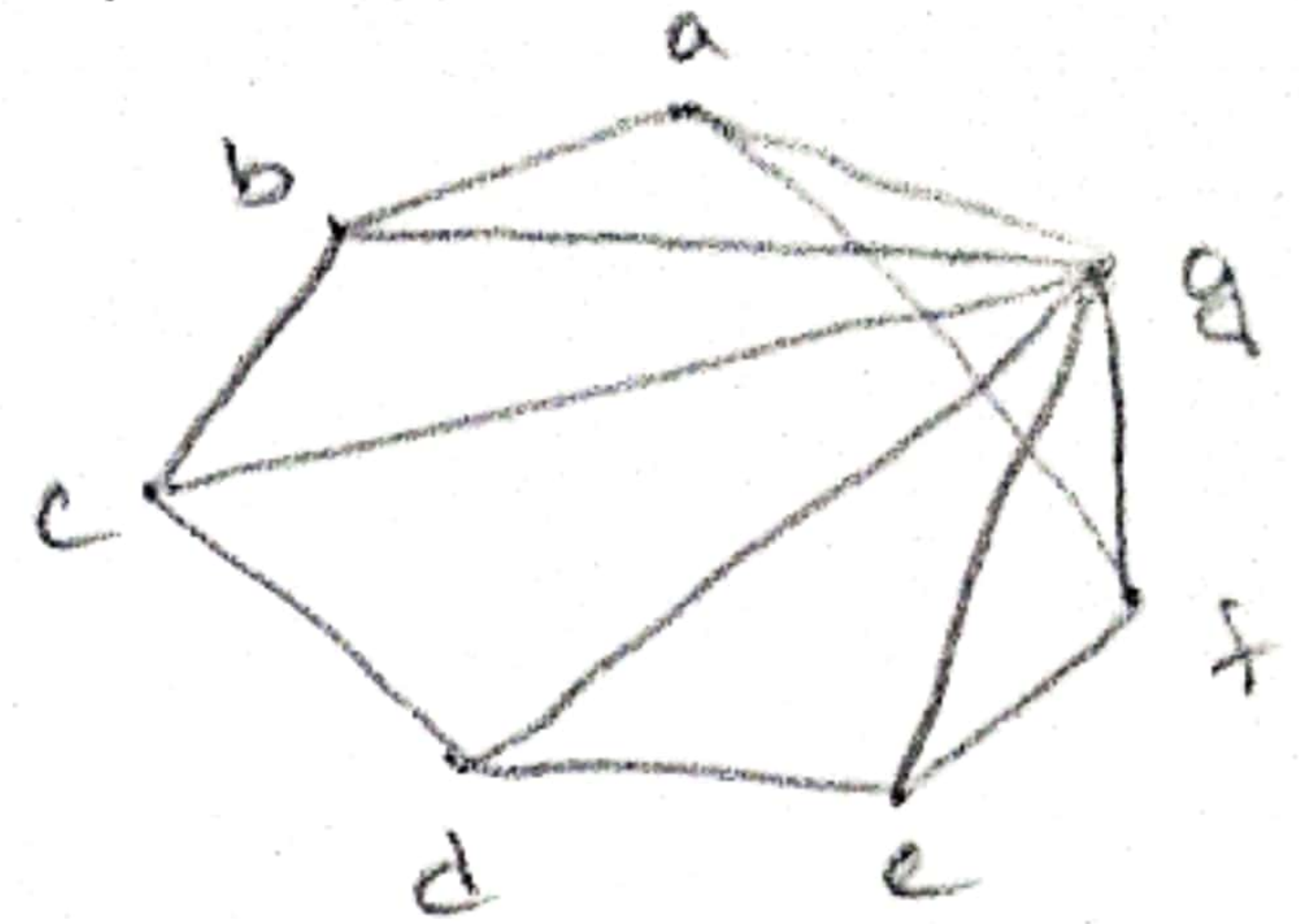


Reduced Flow Table:

	00	01	11	10
a	①/0	9/0	- -	6/0
b	e/0	- -	9/0	⑥/0
c	④/0	d/0	- -	9/0
d	e/0	④/0	9/0	- -
e	②/0	9/0	- -	f/-
f	a/-	- -	9/0	④/1
g	a/0	③/0	④/0	③/0

From critical transitions, we assign states as,

	00	01	11	10
0	a	b	c	g
1	f		d	e



Transition Table

PS	00	01	11	10
a(000)	Ⓐ000/0	010/0	- -	001/0
b(001)	011/0	- -	010/0	Ⓐ001/0
c(011)	Ⓐ011/0	111/0	- -	010/0
d(111)	110/0	Ⓐ111/0	010/0	- -
e(110)	Ⓐ110/0	010/0	- -	100/0-
f(100)	000/-	- -	010/0	Ⓐ100/1
g(010)	000/0	Ⓐ010/0	Ⓐ010/0	Ⓐ010/0

$$D_1 = y_3 \bar{x}_1 x_2 + y_1 x_1 \bar{x}_2 + y_1 y_2 \bar{x}_2$$

$$D_2 = x_2 + y_3 \bar{x}_1 + y_1 y_2 x_1 + y_1 y_2 \bar{x}_1$$

$$D_3 = y_1 y_3 \bar{x}_1 + y_2 y_3 \bar{x}_2 + y_3 \bar{x}_1 x_2$$

$$Z = y_1 y_2 \bar{x}_2$$