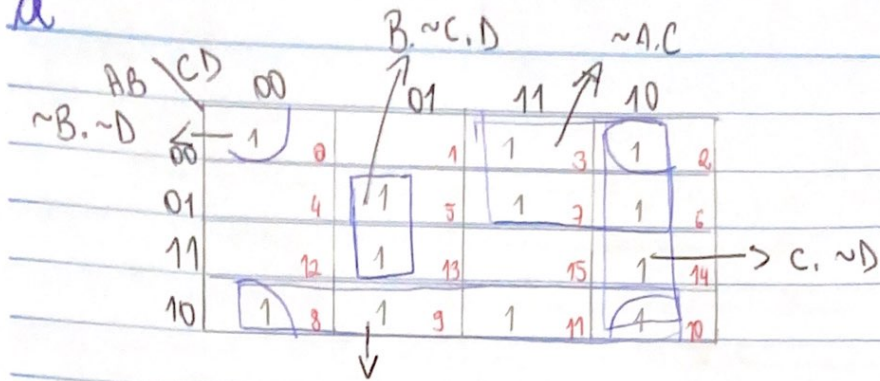


a



$A \cdot \sim B$

$$A \cdot \sim B + C \cdot \sim D + \sim B \cdot \sim D + \sim A \cdot C + B \cdot \sim C \cdot D$$

	A	B	C	D	a	b	c	d	e	f	g	sin	C-2
0	0	0	0	0	1	1	1	1	1	1	0	0	0
1	0	0	0	1	0	0	0	0	1	1	0	0	1
2	0	0	1	0	1	0	1	1	0	1	1	0	2
3	0	0	1	1	1	0	0	1	1	1	1	0	3
4	0	1	0	0	0	1	0	0	1	1	1	0	4
5	0	1	0	1	1	1	0	1	1	0	1	0	5
6	0	1	1	0	1	1	1	1	1	0	1	0	6
7	0	1	1	1	1	0	0	0	1	1	0	0	7
8	1	0	0	0	1	1	1	1	1	1	1	1	-8
9	1	0	0	1	1	0	0	0	1	1	0	1	-7
10	1	0	1	0	1	1	1	1	1	0	1	1	-6
11	1	0	1	1	1	1	0	1	1	0	1	1	-5
12	1	1	0	0	0	1	0	0	1	1	1	1	-4
13	1	1	0	1	1	0	0	1	1	1	1	1	-3
14	1	1	1	0	1	0	1	1	0	1	1	1	-2
15	1	1	1	1	0	0	0	0	1	1	0	1	-1

		00		01		11		10	
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1

$$\sim A.B.\sim C + \sim C.\sim D + A.\sim B.C + \sim A.B.\sim D$$

		00		01		11		10	
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1

$$\sim B.\sim C.\sim D + \sim B.\sim D + C.\sim D$$

		00		01		11		10	
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1

$$\sim B.\sim C.\sim D + B.\sim C.D + A.\sim B.C + C.\sim D + \sim A.\sim B.C$$

		00		01		11		10	
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1
A \ B	C	0	1	0	1	0	1	0	1
	D	0	1	0	1	0	1	0	1



**f**

$\frac{AB}{C}$	00	01	11	10	
00	1 0	1 1	1 3	1 2	$\neg A \cdot \neg B$
01	1 4		1 7		$\neg A \cdot C \cdot D$
11	1 12	1 13	1 15	1 14	$A \cdot B$
10	1 8	1 9			

$\neg C \cdot \neg D$  (circles around 1s in row 00)  
 $A \cdot \neg C$  (circles around 1s in column 01)  
 $\neg C \cdot \neg D + A \cdot \neg C + \neg A \cdot \neg B + \neg A \cdot C \cdot D + A \cdot B$

**g**

$\frac{AB}{C}$	00	01	11	10	
00			1 3	1 2	
01	1 4	1 5		1 6	
11	1 12	1 13		1 14	$C \cdot \neg D$
10	1 8		1 11	1 10	

$A \cdot \neg C \cdot \neg D$  (circles around 1s in row 01)  
 $B \cdot \neg C$  (circles around 1s in column 01)  
 $\neg B \cdot C$  (circles around 1s in column 11)  
 $A \cdot \neg C \cdot \neg D + B \cdot \neg C + \neg B \cdot C + C \cdot \neg D$

**sin**

$\frac{AB}{C}$	00	01	11	10	
00		1	3	2	$A \cdot \neg C + A \cdot D + A \cdot C$
01	4	5	7	6	
11	1 12	1 13	1 15	1 14	
10	1 8	1 9	1 11	1 10	

$A \cdot \neg C$  (circles around 1s in column 01)  
 $A \cdot D$  (circles around 1s in row 10)  
 $A \cdot C$  (circles around 1s in column 11)