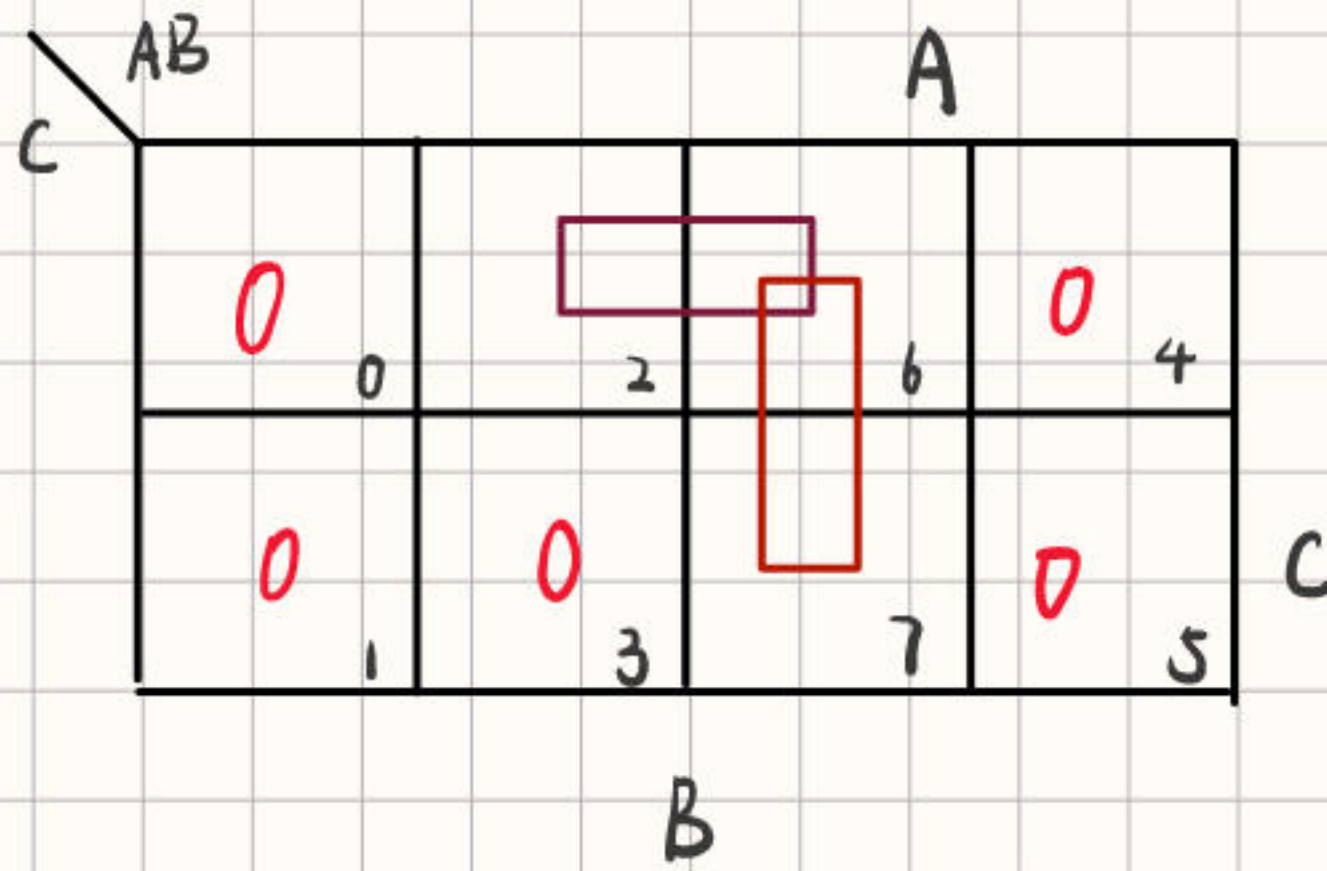


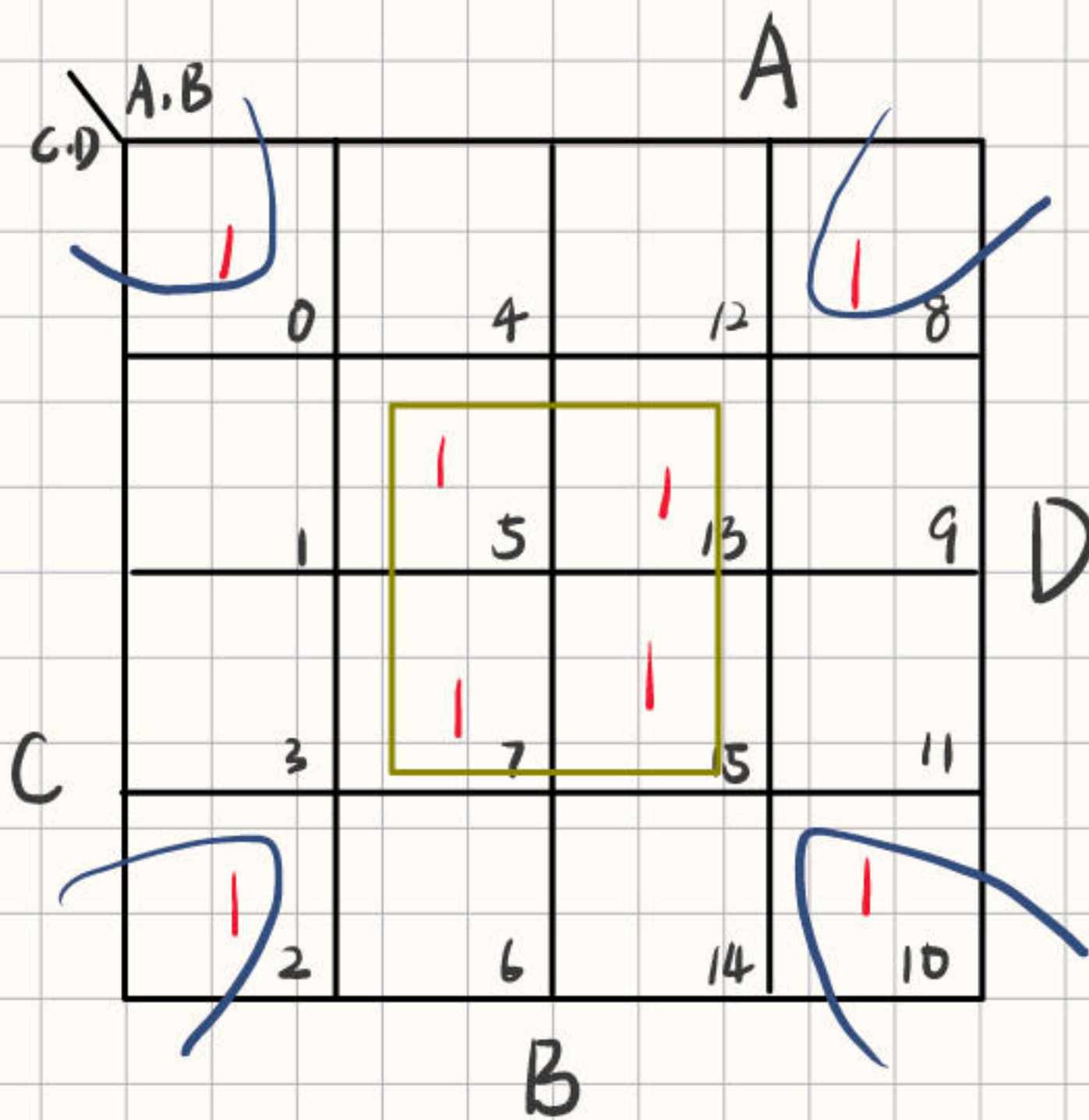
(3)



$$F = \prod M^3(0, 1, 3, 4, 5)$$

$$= B\bar{C} + ABC$$

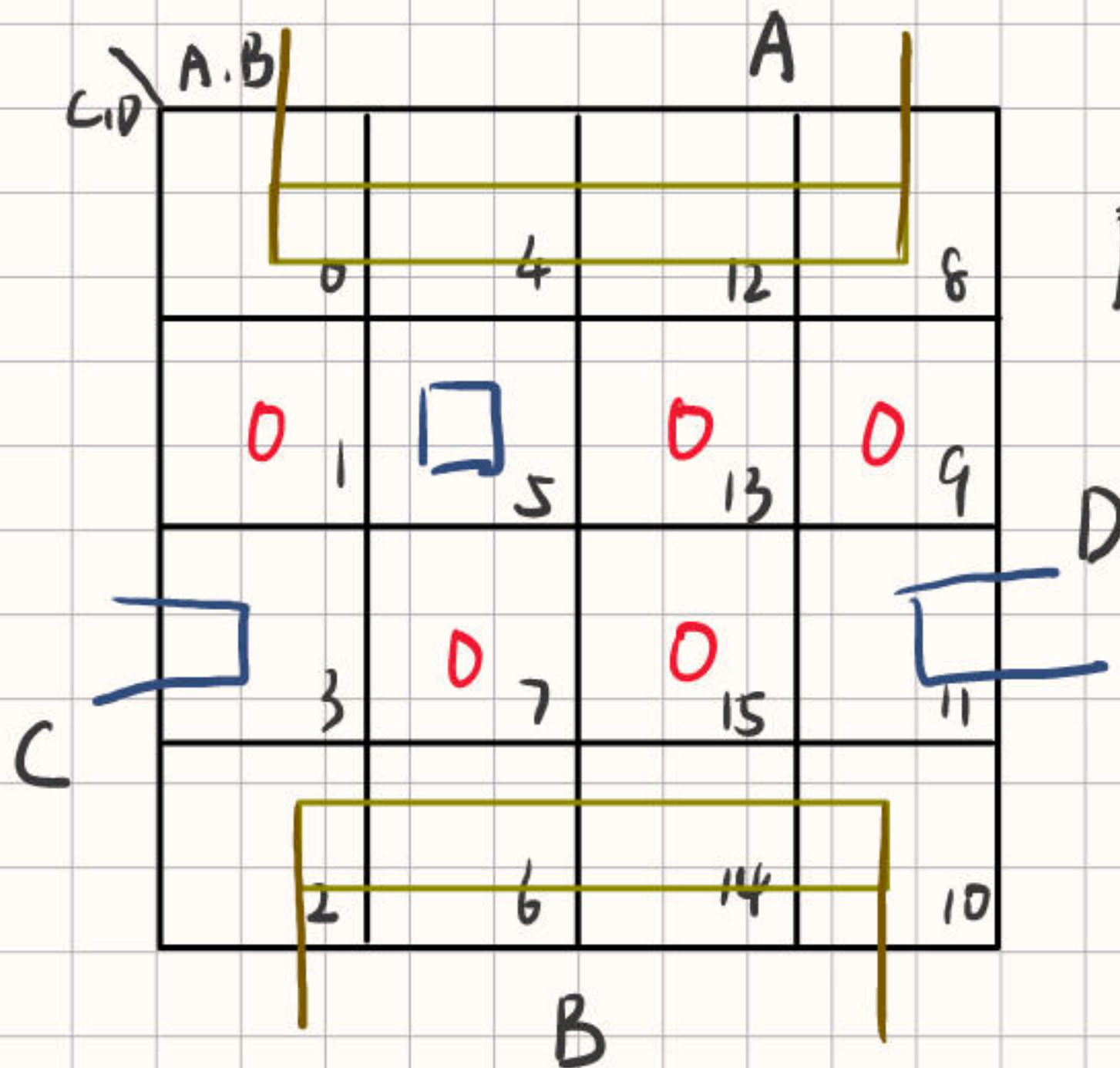
(4)



$$F = \sum m^4(0, 2, 5, 7, 8, 10, 13, 15)$$

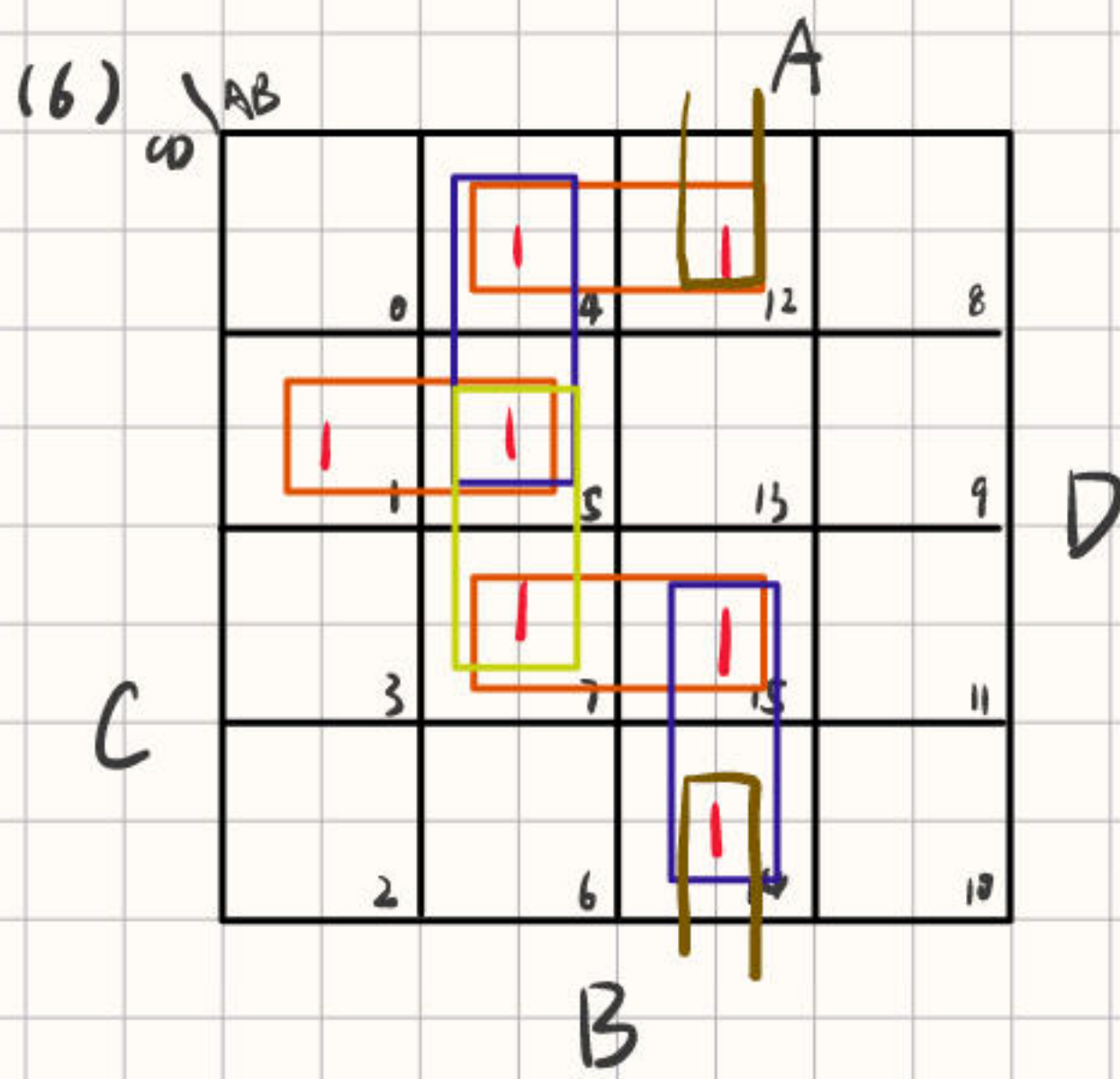
$$= BD + \bar{B}\bar{D}$$

(5)



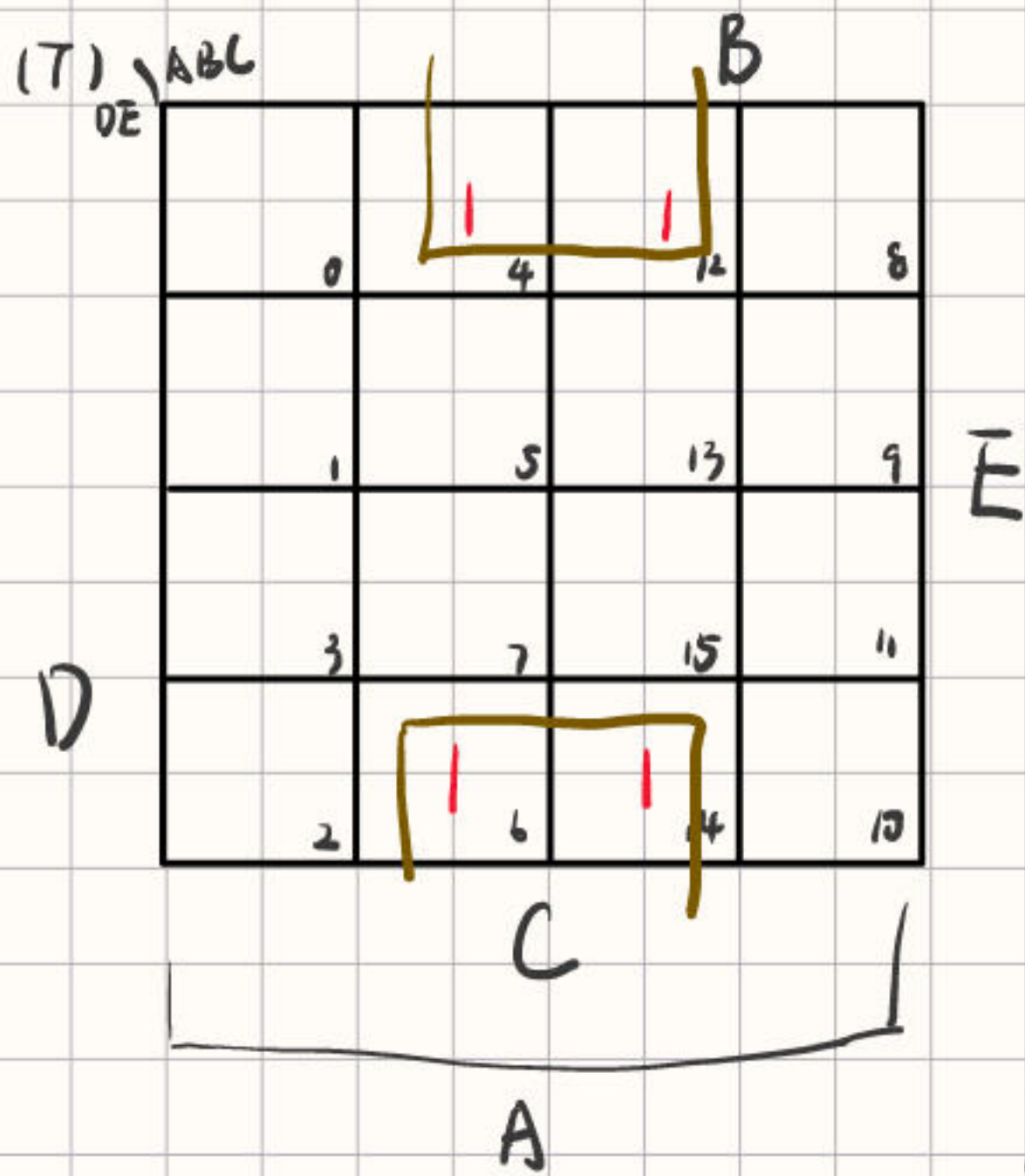
$$F = \prod M^4(1, 3, 7, 9, 11, 13, 15, 10)$$

$$= \bar{D} + \bar{B}CD + \bar{A}B\bar{C}D$$



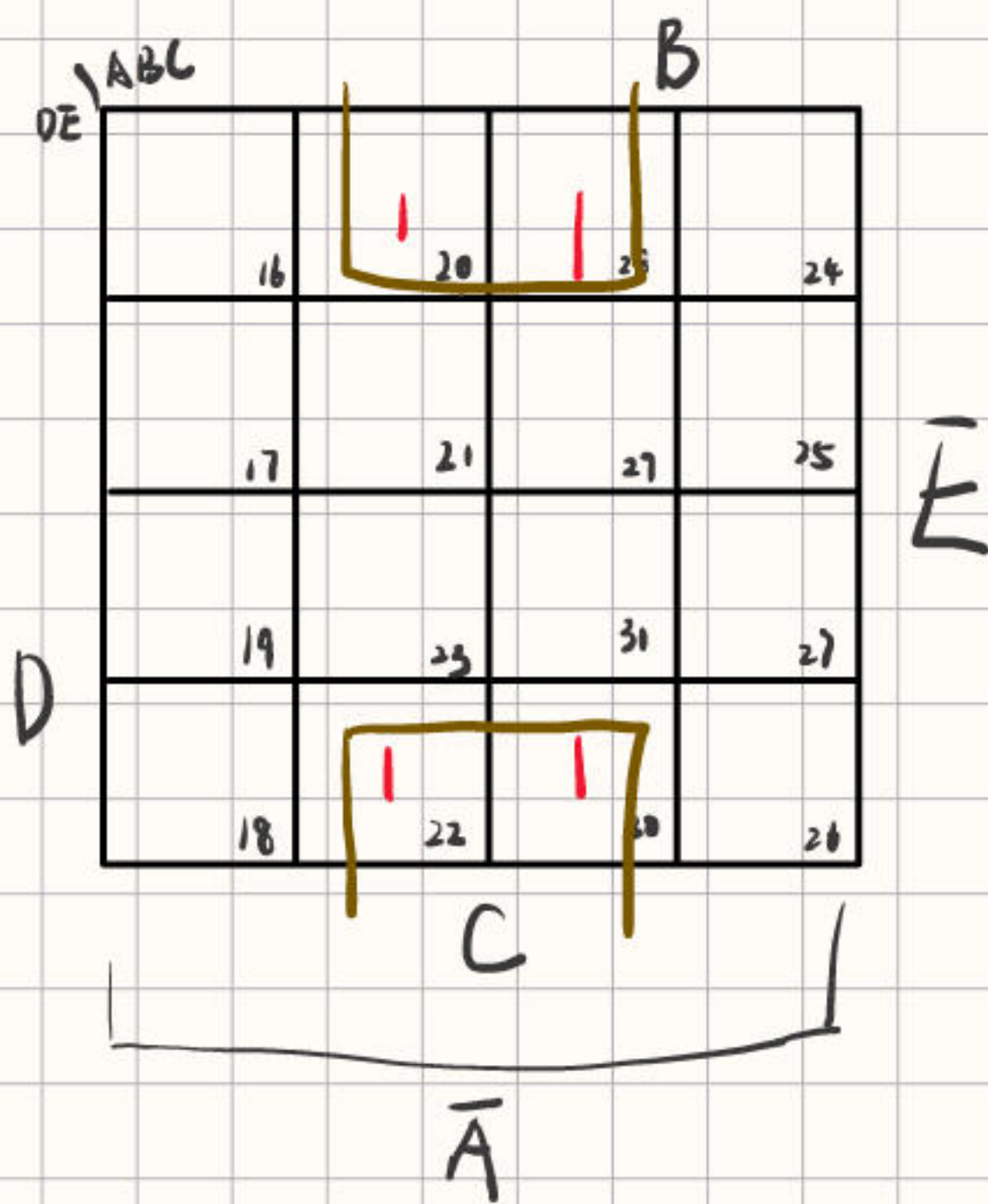
$$F = \sum m^4(1, 4, 5, 7, 12, 14, 15)$$

$$= \bar{A}\bar{C}D + B\bar{C}\bar{D} + BCD + ABC\bar{D}$$



$$F = \sum m^5(4, 6, 12, 14, 20, 22, 28, 30)$$

$$= CDE$$



8.

BCD

AZF

0	4	12	8
1	5	13	9
3	7	15	11
2	6	14	10

E

D

C

F

B

BCD

AZF

16	20	28	24
17	21	29	25
19	23	31	27
18	22	30	26

E

D

C

F

BCD

AZF

32	36	44	40
33	37	45	41
35	39	47	43
34	38	46	42

A

E

D

F

BCD

AZF

48	52	60	56
49	53	61	57
51	55	63	59
50	54	62	58

E

D

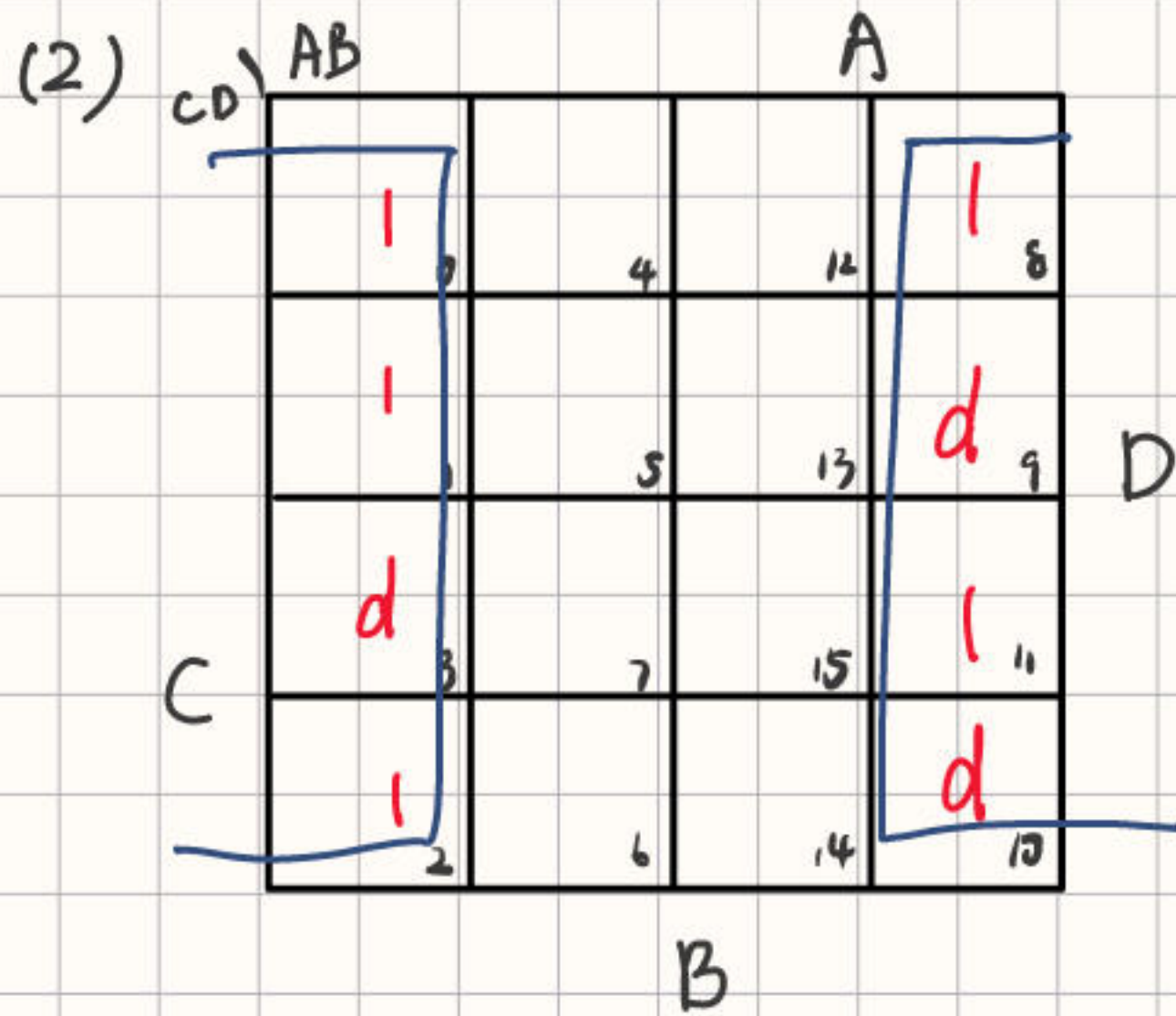
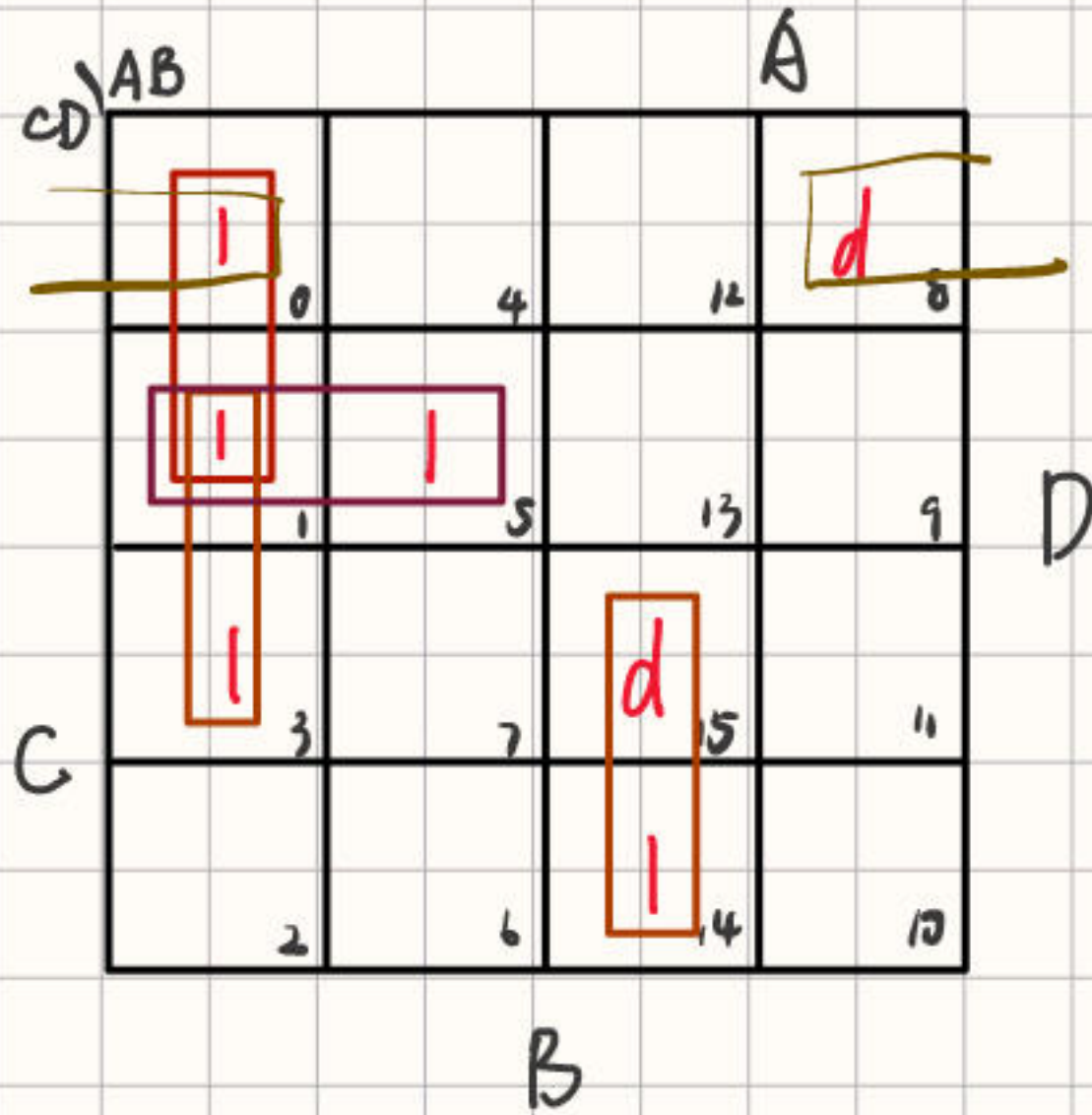
F

$$F = \sum m^b (0, 1, 10, 11, 26, 27, 32, 33, 48 \sim 63)$$

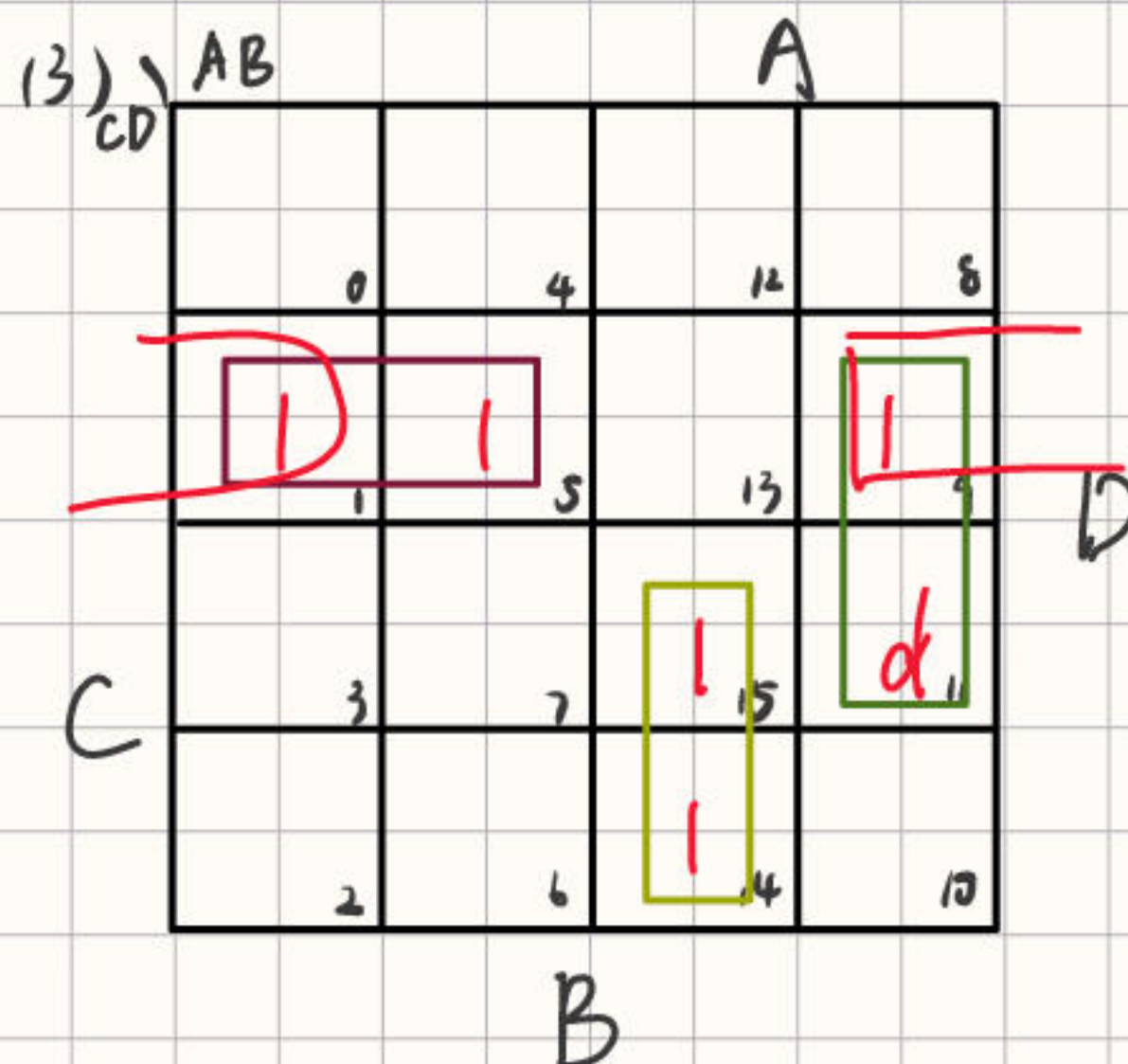
$$= AB + \bar{B}\bar{C}\bar{D}\bar{E} + \bar{A}C\bar{D}E$$

2.20.

$$(1) F = \sum m^4(0, 1, 3, 5, 14) + d(8, 15) = \bar{A}\bar{B}D + \bar{A}\bar{B}C + \bar{A}B\bar{C}D + ABC$$

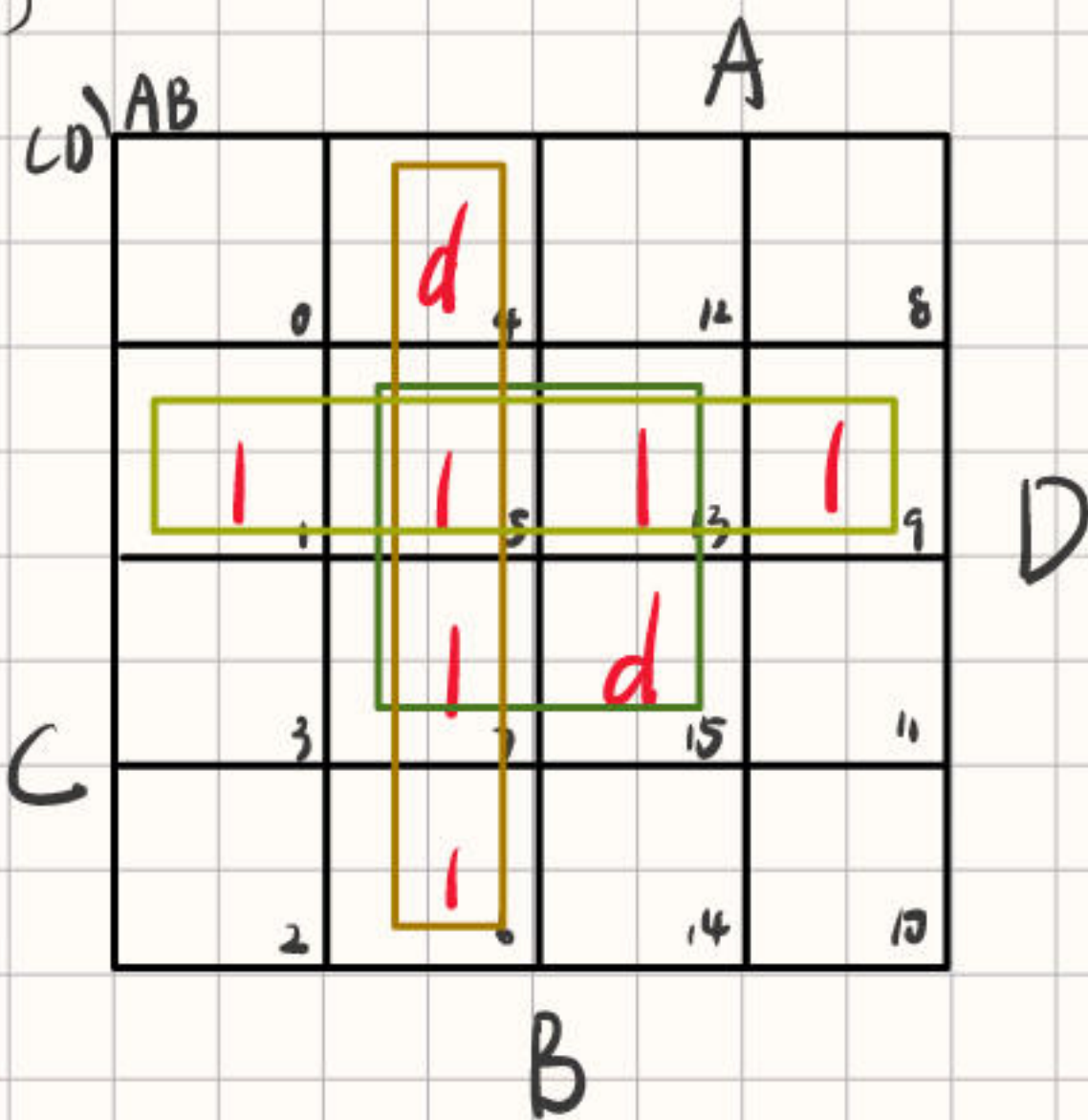


$$F = \sum m^4(0, 1, 2, 8, 11) + d(3, 9, 15) = \bar{B}$$



$$F = \sum m^4(1, 5, 9, 14, 15) + d(11) = ABC + \bar{A}\bar{C}D + A\bar{B}D$$

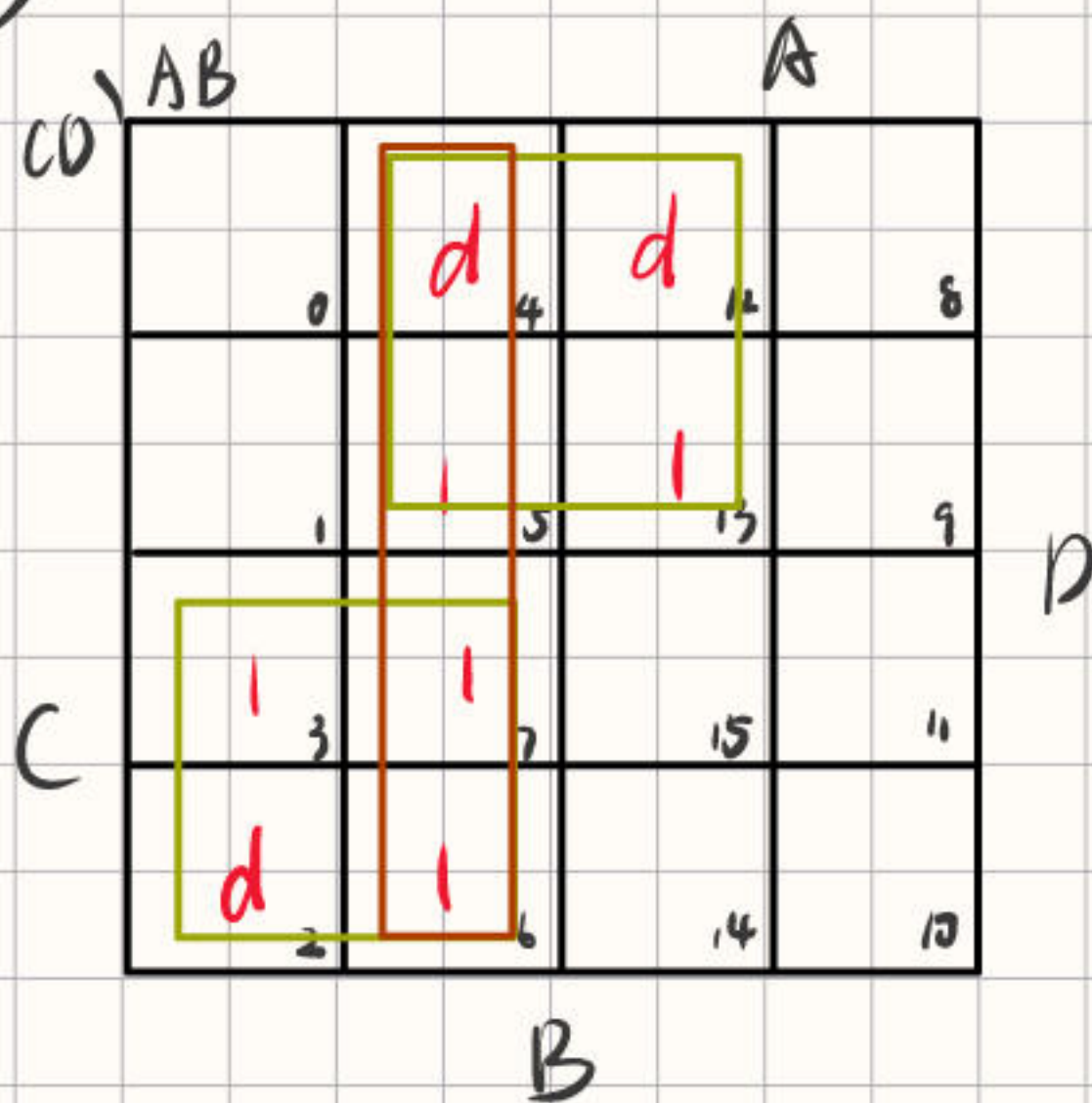
(4)



$$F = \sum m^+(1, 5, 6, 7, 9, 13) + d(4, 15)$$

$$= BD + \bar{A}\bar{B}\bar{D} + \bar{B}\bar{C}D$$

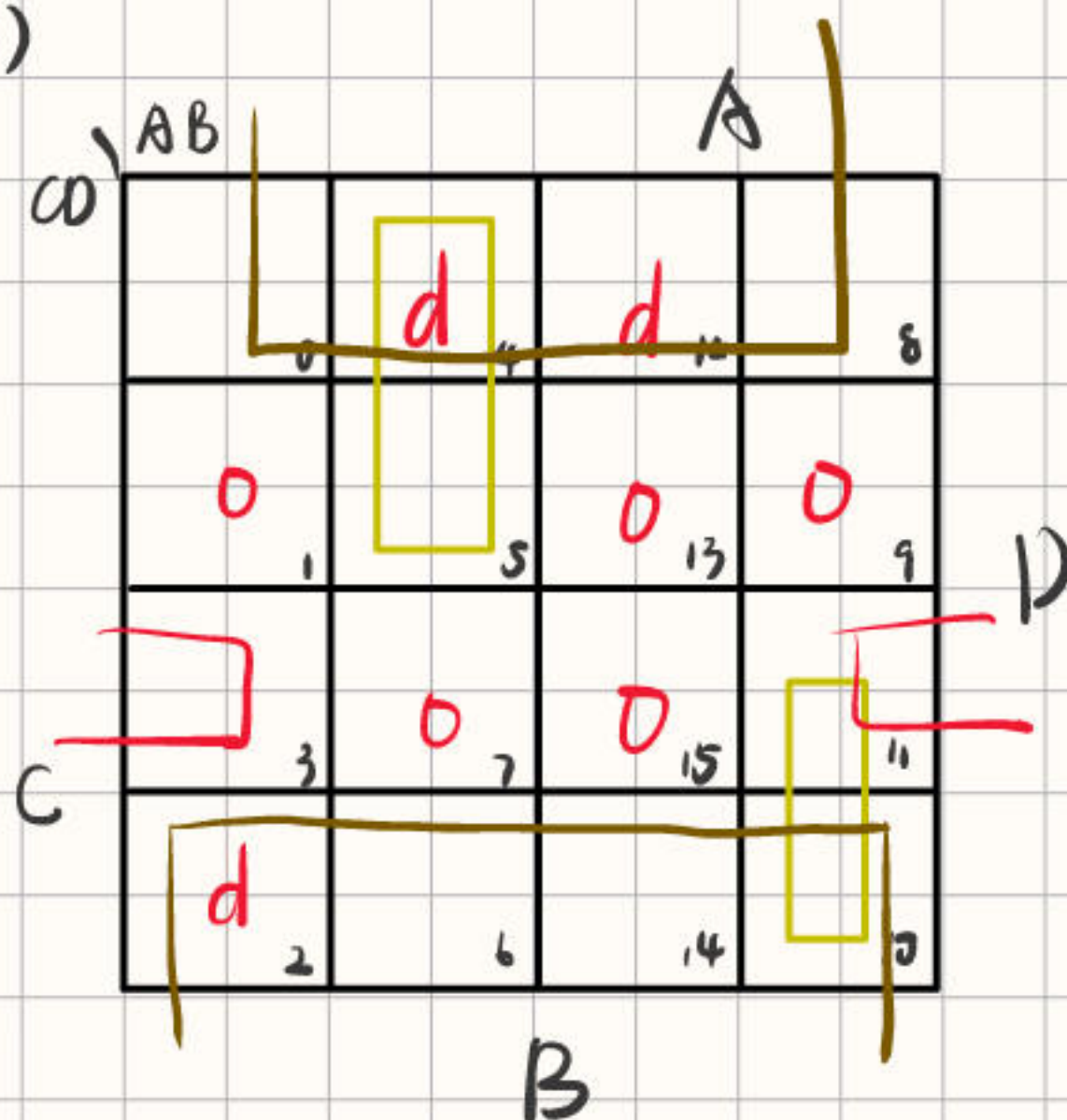
(5)



$$F = \sum m^+(3, 5, 6, 7, 13) + d(1, 2, 4, 12, 15)$$

$$= \bar{A}C + B\bar{C}$$

(6)



$$F = \prod M^+(1, 7, 9, 13, 15) + d(2, 4, 12)$$

$$= \bar{D} + \bar{B}CD + \bar{A}\bar{B}\bar{C}D$$

2.21

(1)

CD \ AB	A			
	0	4	12	8
1				
5				
13				
9				
3				
7				
15				
11				
2				
6				
14				
10				

B

D

C

$$F = \bar{A}B + AC + AB\bar{C}$$

$$= B + A\bar{B}C$$

(2)

CD \ AB	A			
	0	4	12	8
1				
5				
13				
9				
3				
7				
15				
11				
2				
6				
14				
10				

B

D

C

$$F = \bar{A}\bar{C}D + \bar{B}CD + A\bar{C}D + BCD$$

$$= D$$

(3)

CD \ AB	A			
	0	4	12	8
1				
5				
13				
9				
3				
7				
15				
11				
2				
6				
14				
10				

B

D

C

$$F = AB\bar{C} + ABCD + BC$$

$$= BC + AB\bar{C} + A\bar{B}CD$$

(4)

CD \ AB	A		B	
	0	4	12	8
C	0	0	0	0
	1	5	13	9
C	0	3	7	15
	2	6	14	10

$$F = (\bar{A} + \bar{B})(\bar{A} + B + \bar{C})(A + \bar{C} + D)$$

$$= A\bar{D} + ACD + \bar{A}BC$$

(5)

CD \ AB	A		B	
	0	4	12	8
C				
	1	5	13	9
C				
	2			10

$$F = AB\bar{C}\bar{D} + \bar{A}B\bar{C} + ABD + \bar{A}CD + B\bar{C}\bar{D}$$

$$= B + \bar{A}\bar{B}CD$$

(6)

C \ AB	A		B	
	0	2	6	4
C				
	1	3	7	5

$$F = (\bar{A} + \bar{B})(AB + C)$$

$$= AB + (\bar{A} + \bar{B})\bar{C}$$

$$= AB + \bar{A}\bar{C} + \bar{B}\bar{C}$$

$$= \bar{C} + ABC$$

