

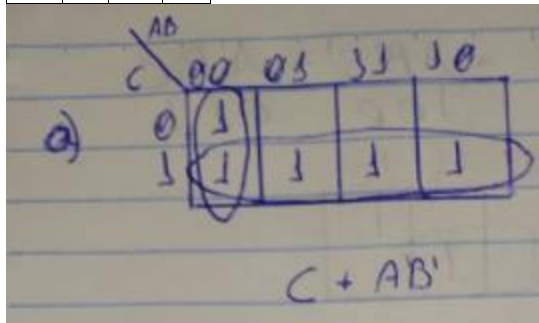
Nome: \_\_\_\_\_ MATHEUS MIKSZA \_\_\_\_\_

## Lista 8 – Mapa de Karnaugh

1) Dada a tabela verdade, encontre a expressão simplificada, utilizando o mapa de Karnaugh.

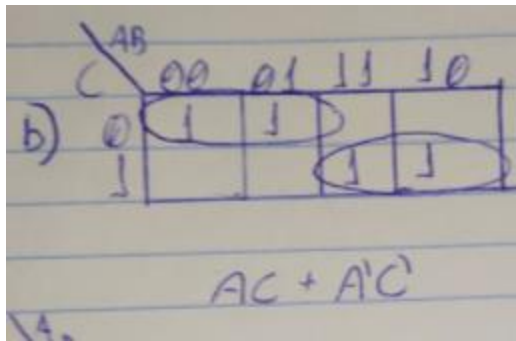
a)

A	B	C	S
0	0	0	1
0	0	1	1
0	1	0	0
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	0
1	1	1	1



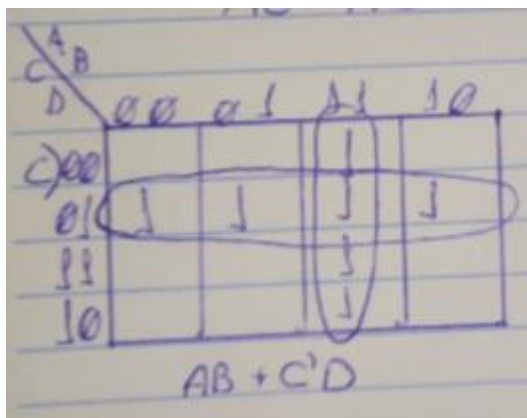
b)

A	B	C	S
0	0	0	1
0	0	1	0
0	1	0	1
0	1	1	0
1	0	0	0
1	0	1	1
1	1	0	0
1	1	1	1



c)

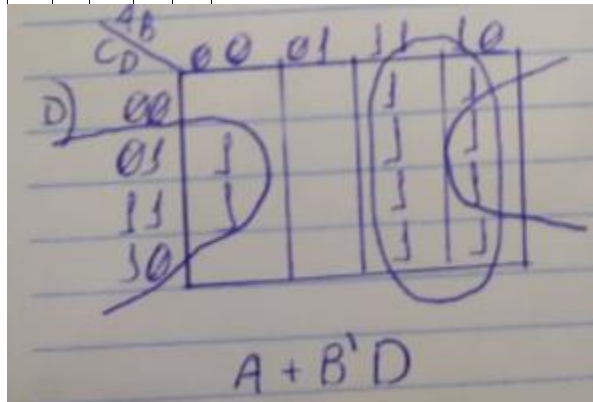
A	B	C	D	S
0	0	0	0	0
0	0	0	1	1
0	0	1	0	0
0	0	1	1	0
0	1	0	0	0
0	1	0	1	1
0	1	1	0	0
0	1	1	1	0
1	0	0	0	0
1	0	0	1	1
1	0	1	0	0
1	0	1	1	0
1	1	0	0	1
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1



d)

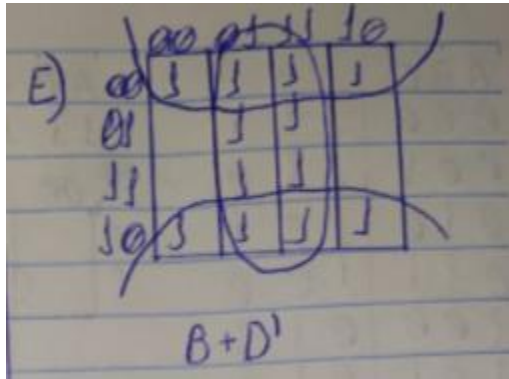
A	B	C	D	S
0	0	0	0	0
0	0	0	1	1
0	0	1	0	0
0	0	1	1	1
0	1	0	0	0

0	1	0	1	0
0	1	1	0	0
0	1	1	1	0
1	0	0	0	1
1	0	0	1	1
1	0	1	0	1
1	0	1	1	1
1	1	0	0	1
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1



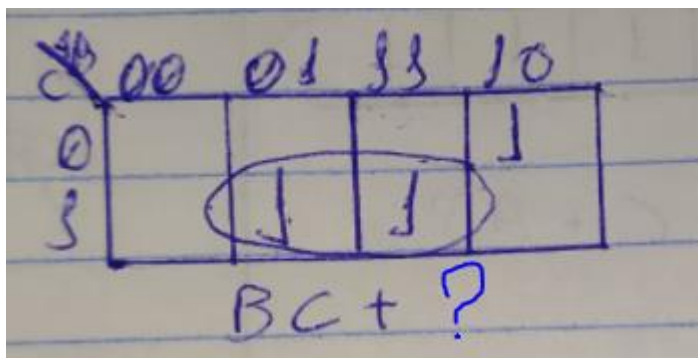
e)

A	B	C	D	S
0	0	0	0	1
0	0	0	1	0
0	0	1	0	1
0	0	1	1	0
0	1	0	0	1
0	1	0	1	1
0	1	1	0	1
0	1	1	1	1
1	0	0	0	1
1	0	0	1	0
1	0	1	0	1
1	0	1	1	0
1	1	0	0	1
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1



2) Encontre a expressão simplificada, utilizando o mapa de Karnaugh.

a)  $S = ABC + AB'C' + A'BC$



b)  $S = A'.B'.C + A'.B'.C' + A.B.C' + A'.B.C + A.B'.C'$

	00	01	11	10
0				
1				

$$b) S = A'B'C + A'B'C' + A.B.C' + A'.B.C + A.B'.C'$$

001 000 110 011 100

c \ ab					
		00	01	11	10
c	0	1		1	1
	1	1	1		