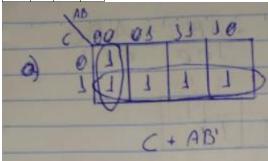
Lista 8 – Mapa de Karnaugh

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

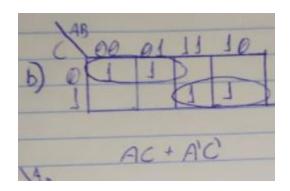
a)

Α	В	С	S
0	0	0	1
0	0	1	1
0	1	0	1 1 0 1
0	1	0 1 0 1	1
A 0 0 0 1 1	B 0 0 1 1 0 1	0	0
1	0	0 1	1
1	1	0	0
1	1	1	1

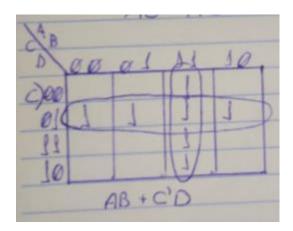


b)

5)					
Α	В	С	S 1		
0	0	0	1		
0	0	1	0		
0	0 0 1	0	1		
0	1	1	0		
0 0 0 1 1	1 0 0 1	0	0 0 1		
1	0	1	1		
1	1	0 1 0 1 0 1 0	0		
1	1	1	1		

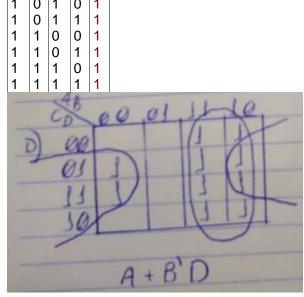


c)				
A	В	С	D	S
0	0	0	0	0
0	0	0	1	1
0	0	1	0	0
0	0	1	1	0
0	1	0	0	0
0	1	0	1	1
0	1	1	0	0
0	1	1	1	0
1	0	0	0	0
1	0	0	1	1
1	0	1	0	0
1	0	1	1	0
1	1	0	0	1
1	1	C 0 0 1 1 0 0 1 1 0 0 1 1	1	1
1	1	1	0	1
C) A 0 0 0 0 0 0 1 1 1 1 1 1 1	B 0 0 0 0 1 1 1 0 0 0 1 1 1 1 1	1	D 0 1 0 1 0 1 0 1 0 1 0 1 0 1	S 0 1 0 0 0 1 0 0 1 0 0 1 1 1 1 1 1 1 1



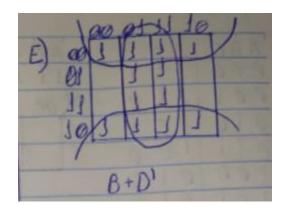
d)				
Α	В	С	D	S
0	0	0	0	0
0	0	0	1	1
0	0	1	0	0
0	0	1	1	1
0	1	0	0	0

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

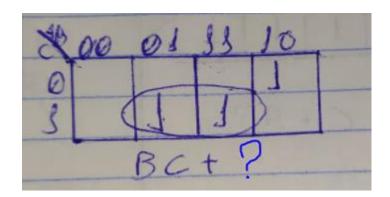


e)

Α	В	С	D	S
A 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1	B 0 0 0 0 1 1 1 1 0 0 0 0 1 1 1 1 1	0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 1 0 0 1	0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	<mark>S</mark>
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.



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'

0 0 1 000 110 000

