

SIMPLIFICACIÓN DE FUNCIONES LÓGICAS

Método Gráfico De Karnaugh

A)

A	B	C	F
0	0	0	0
0	0	1	0
0	1	0	1
1	0	0	0
1	1	0	1
1	0	1	0
0	1	1	1
1	1	1	1

	AB 00	AB 01	AB 11	AB 10
C 0		X	X	
C 1		X	X	

$$F = B$$

B)

A	B	C	F
0	0	0	0
0	0	1	1
0	1	0	1
1	0	0	1
1	1	0	1
1	0	1	0
0	1	1	1
1	1	1	1

	AB 00	AB 01	AB 11	AB 10
C 0		X	X	X
C 1	X	X	X	

$$F = B + \overline{A}\overline{C} + \overline{A}C$$

C)

A	B	C	F
0	0	0	1
0	0	1	1
0	1	0	0
1	0	0	1
1	1	0	0
1	0	1	1
0	1	1	1
1	1	1	0

	AB 00	AB 01	AB 11	AB 10
C 0	X			X
C 1	X	X		X

$$F = \overline{B} + \overline{A}C$$

D)

A	B	C	F
0	0	0	1
0	0	1	1
0	1	0	1
1	0	0	1
1	1	0	0
1	0	1	1
0	1	1	1
1	1	1	1

	A B 0 0	A B 0 1	A B 1 1	A B 1 0
C 0	X	X		X
C 1	X	X	X	X

$$F = \overline{A} + C + \overline{B}$$

E)

A	B	C	F
0	0	0	0
0	0	1	1
0	1	0	1
1	0	0	0
1	1	0	0
1	0	1	1
0	1	1	0
1	1	1	1

	A B 0 0	A B 0 1	A B 1 1	A B 1 0
C 0		X		
C 1	X		X	X

$$F = \overline{B}C + \overline{A}B\overline{C} + AC$$