LABORATORIO 4

EJERCICIO #1

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

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

EJERCICIO #2

	00	01	11	10
0	1	0	0	X
1	X	0	0	1

$Y = \bar{B}$

EJERCICIO #3

CD \ AB	00	01	11	10
00	1	0	1	0
01	0	1	0	1
11	1	0	1	0
10	0	1	0	1

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

TABLA 04

CD \ AB	00	01	11	10
00	X	0	1	1
01	X	X	1	0
11	0	X	1	1
10	X	0	X	X

$y = AB + A\overline{CD} + ACD$

A	B	C	D	Y
X	0	0	0	1
0	0	0	1	0
0	0	1	0	0
0	0	1	1	0
0	1	0	0	0
0	1	0	1	0
0	1	1	0	0
0	1	1	1	0
X	0	0	0	1
1	0	0	1	1
1	0	1	0	1
1	0	1	X	1
1	1	0	0	1
1	X	0	1	1
1	X	X	0	1
1	1	1	1	0

AB \ CD	00	01	11	10
00	1	0	1	1
01	0	0	1	
11	0	0	0	1
10	0	0	1	

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

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

INCISO 2

	00	01	11	10
0	1	0	0	1
1	1	1	1	1

$Y = \bar{B} + C$

A	B	C	D	Y
0	0	0	0	0
X	X	0	1	1
0	0	1	0	0
0	0	1	1	0
X	1	X	X	1
X	1	0	1	1
X	1	X	X	1
X	1	X	X	1
1	0	0	0	0
1	X	0	1	1
1	X	1	0	0
1	X	X	1	1
1	1	0	X	1
1	1	0	1	1
1	1	1	X	1
1	1	X	1	1

INCISO 3

	00	01	11	10
00	0	1	1	0
01	1	1	1	1
11	0	1	1	1
10	0	1	1	0

$Y = B + \bar{C}D + AD$

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

INCISO 4

	00	01	11	10
0	1	1	1	0
1	0	1	1	0

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

EJERCICIO # 5

A	B	C	Y
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	1
1	0	1	1
1	1	0	0
1	1	1	1

A = ARMADO

B = SENSOR VENTANA

C = SENSOR MOVIMIENTO

Y = ALARMA Y LUCES

$$SOP = Y = A\bar{B}\bar{C} + A\bar{B}C + ABC$$

$$POS = Y = (A+B+C)*(A+B+\bar{C})*(A+\bar{B}+C)*(A+\bar{B}+\bar{C})$$
$$*(\bar{A}+\bar{B}+C)$$

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

RESUMIDO

$$Y = AC + A\bar{B}$$