24-07-2020

Laboratorio No. 2

Ejercicio 1

a) $Y = (\bar{A} \cdot B) + (A \cdot \bar{B})$

A	B	$\bar{A}$	$\bar{B}$	$\bar{A}B$	$A\bar{B}$	Y
0	0	1	1	0	0	0
0	1	1	0	1	0	1
1	0	0	1	0	1	1
1	1	0	0	0	0	0

b) $y = (\bar{A} \cdot \bar{B}) + (A \cdot B)$

A	B	$\bar{A}$	$\bar{B}$	$\bar{A} \cdot \bar{B}$	AB	Y
0	0	1	1	1	0	1
0	1	1	0	0	0	0
1	0	0	1	0	0	0
1	1	0	0	0	1	1

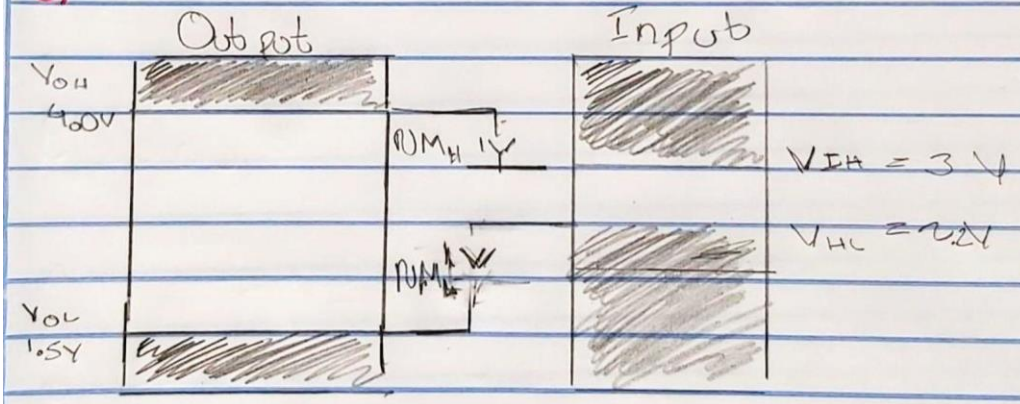
ejercicio 3

a) Not

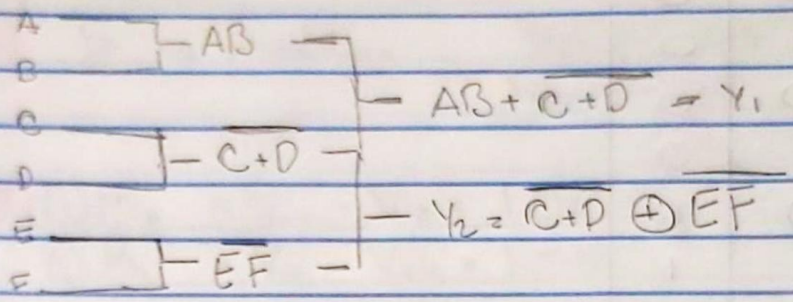
b) Si es posible. $V_{IL} = 2.5V$ $V_{IH} = 3.0V$
$V_{OL} = 1.5V$ $V_{OH} = 4.0V$

c) $NM_H = V_{OH} - V_{IH} = 1.0V$
$NM_L = V_{IL} - V_{OH} = 1.0V$

d)

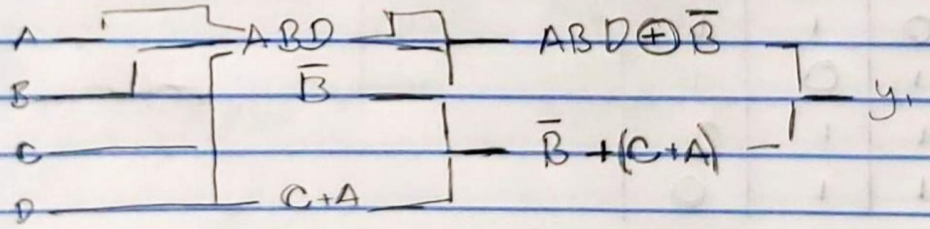


Problema 4



$$Y_1 = AB + \overline{C+D} \qquad Y_2 = \overline{C+D} \oplus \overline{EF}$$

Ejercicio 5

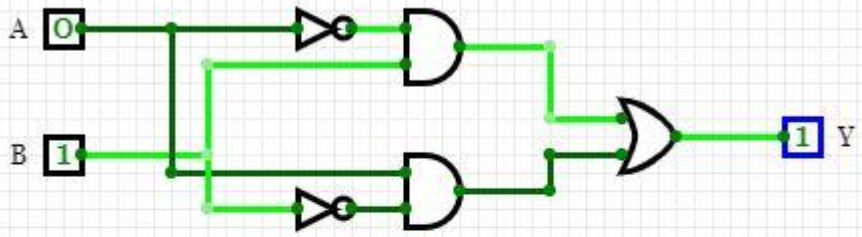


$$y_1 = \overline{[ABD + \bar{B}] \oplus [\bar{B} + (C+A)]}$$

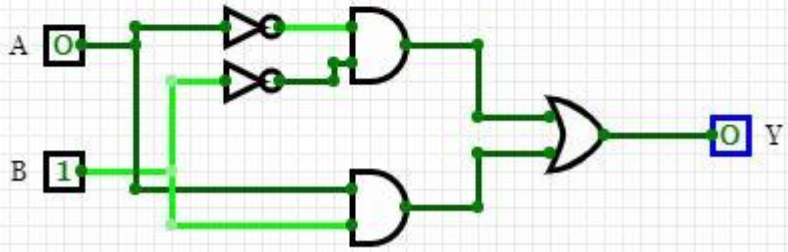
$$Y = \overline{[ABD + \bar{B}] \oplus [\bar{B} + (C+A)]}$$

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

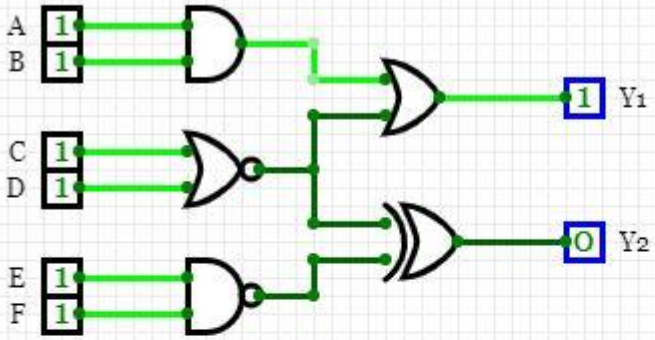
Ejercicio 1A



Ejercicio 1B



Ejercicio 4



Ejercicio 5