

Solución ejercicios 1-2-10-11-12

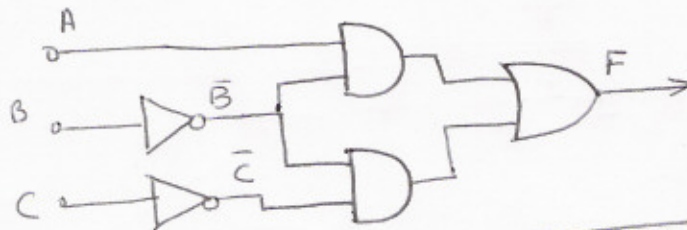
1)

A	B	C	F
0	0	0	1
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	0

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

	$\bar{A}\bar{B}$	$\bar{A}B$	$A\bar{B}$	AB
C	0	0	0	1
\bar{C}	1	0	0	1
	$\bar{B}\bar{C}$			$A\bar{B}$

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

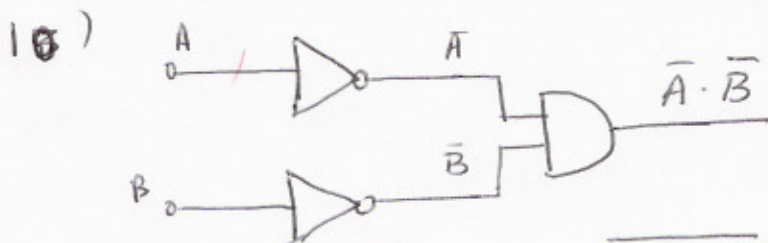
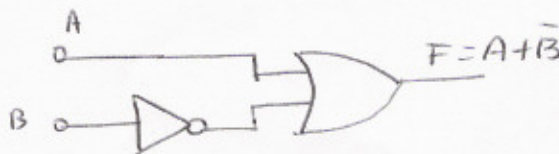


2)

A	B	C	F
0	0	0	1 → $\bar{A}\bar{B}\bar{C}$
0	0	1	1 → $\bar{A}\bar{B}C$
0	1	0	0
0	1	1	0
1	0	0	1 → $A\bar{B}\bar{C}$
1	0	1	1 → $A\bar{B}C$
1	1	0	1 → $AB\bar{C}$
1	1	1	1 → ABC

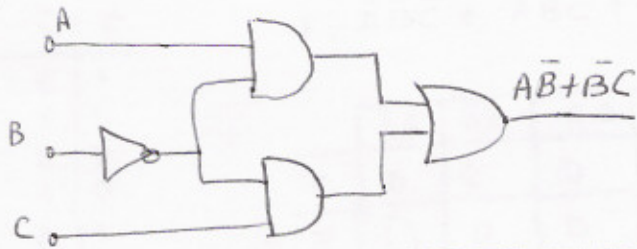
	$\bar{A}\bar{B}$	$\bar{A}B$	$A\bar{B}$	AB
C	1	0	1	1
\bar{C}	1	0	1	1
	\bar{B}		A	

$$F = A + \bar{B}$$



$$\bar{A} \cdot \bar{B} = \overline{\overline{\bar{A} \cdot \bar{B}}} = \overline{\overline{\bar{A} + \bar{B}}} = \overline{A + B} = \underline{\underline{NOR}}$$

11) A)

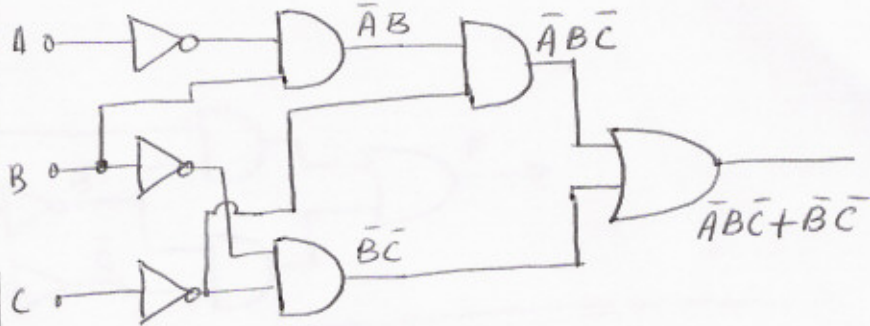


$$A\bar{B} = 10x \begin{cases} 100 \\ 101 \end{cases}$$

$$\bar{B}C = x01 \begin{cases} 001 \\ 101 \end{cases}$$

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

B)



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

$$\bar{A}\bar{B}\bar{C} = 010$$

$$\bar{B}\bar{C} = x00 \begin{cases} 000 \\ 100 \end{cases}$$

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

12) EXOR $F = A \oplus B \oplus C$

Símbolo

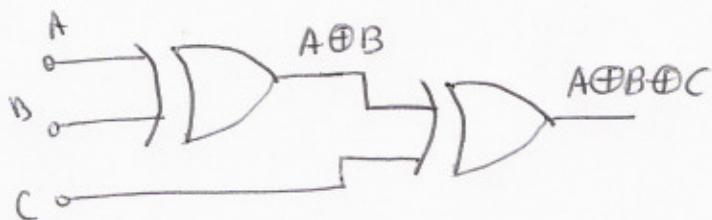


Tabla de la verdad

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

Tiene "1" en la salida cuando el nº de "1" a la entrada es impar