

In Class Exercise 2 – Julio Tain Sueiras
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1.Truth Tables

x	y	\bar{y}	$\bar{y}+x$	$x(\bar{y}+x)$
1	1	0	1	1
1	0	1	1	1
0	1	0	0	0
0	0	1	1	0

2.Truth Tables

a	b	c	\bar{b}	$\bar{b}c$	$a+(\bar{b}c)$
1	1	1	0	0	1
1	1	0	0	0	1
1	0	1	1	1	1
1	0	0	1	0	1
0	1	1	0	0	0
0	1	0	0	0	0
0	0	1	1	1	1
0	0	0	1	0	0

3.Truth Tables

a	b	c	$b+c$	$a+(b+c)$	$b(a+(b+c))$
1	1	1	1	1	1
1	1	0	1	1	1
1	0	1	1	1	0
1	0	0	0	1	0
0	1	1	1	1	1
0	1	0	1	1	1
0	0	1	1	1	0
0	0	0	0	0	0

4.Truth Tables

A	B	C	AB	AB+C	$\overline{AB+C}$
1	1	1	1	1	0
1	1	0	1	1	0
1	0	1	0	1	0
1	0	0	0	0	1
0	1	1	0	1	0
0	1	0	0	0	1
0	0	1	0	1	0
0	0	0	0	0	1

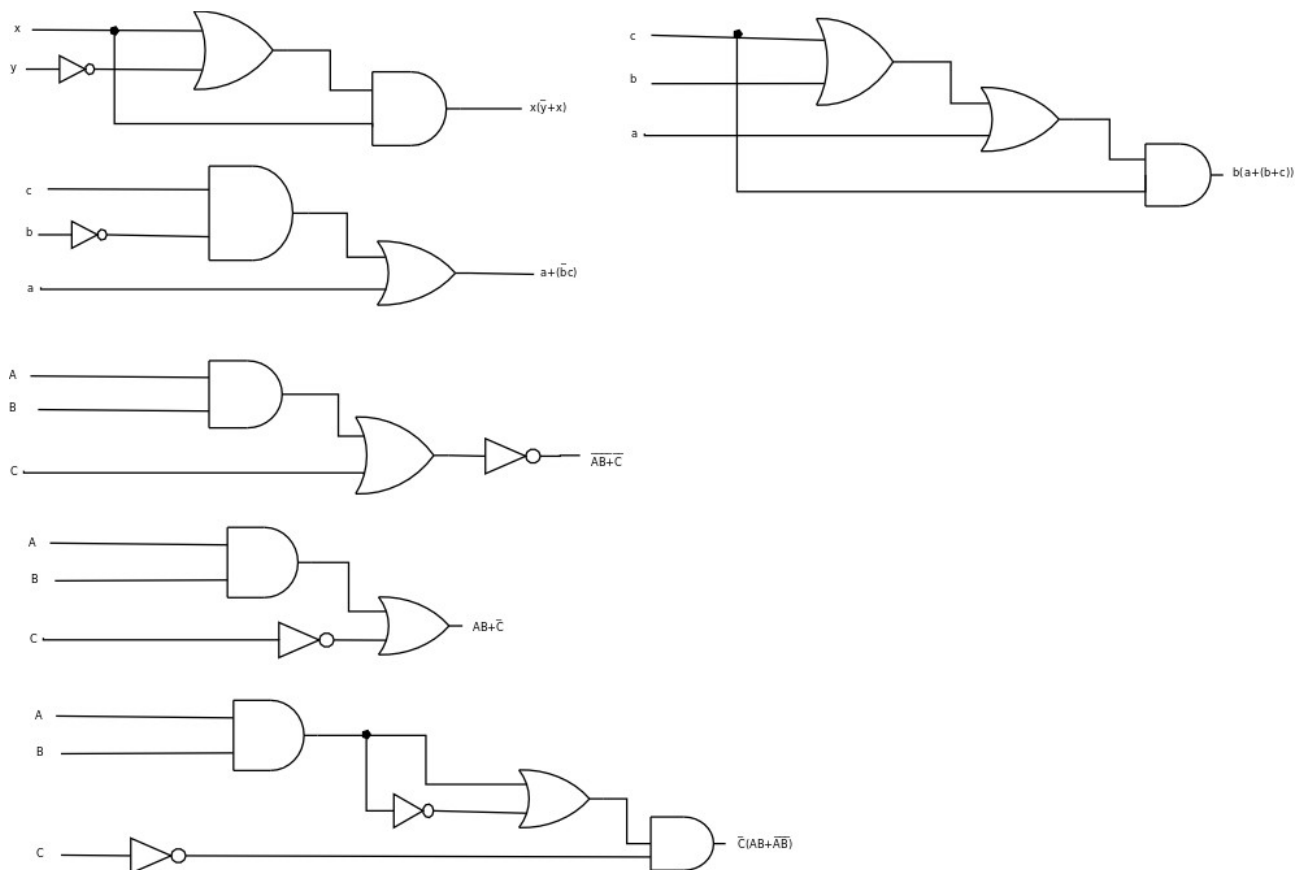
5.Truth Tables

A	B	C	AB	\overline{C}	$AB+\overline{C}$
1	1	1	1	0	1
1	1	0	1	1	1
1	0	1	0	0	0
1	0	0	0	1	1
0	1	1	0	0	0
0	1	0	0	1	1
0	0	1	0	0	0
0	0	0	0	1	1

5. Truth Tables

A	B	C	\bar{C}	AB	$\bar{A}\bar{B}$	$AB+\bar{A}\bar{B}$	$\bar{C}(AB+\bar{A}\bar{B})$
1	1	1	0	1	0	1	0
1	1	0	1	1	0	1	1
1	0	1	0	0	1	1	0
1	0	0	1	0	1	1	1
0	1	1	0	0	1	1	0
0	1	0	1	0	1	1	1
0	0	1	0	0	1	1	0
0	0	0	1	0	1	1	1

Logic Gates



Part 2.

1. $\bar{c}+(ab)$ 2. $\bar{r}(\overline{pq}+rp)$ 3. $\bar{r}(\bar{p}+q)$ 4. $\bar{q}r+p$

5. $q+(p(\bar{q}+r))$