Rafael de Souza Damasceno ___/___/___

1) $(A' + B + C')' + AB' + AC$

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

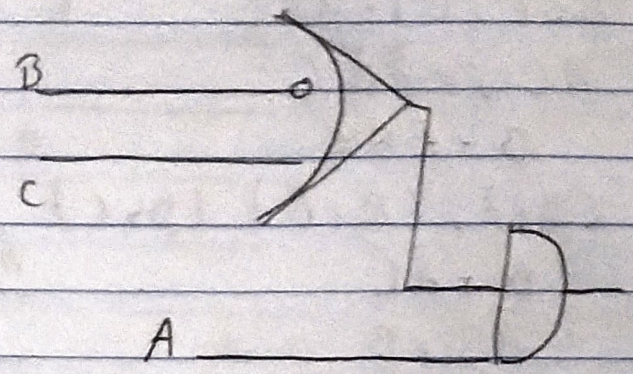
$A(\bar{B}\bar{C} + \bar{B}) + AC$

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

$A(\bar{B} \cdot 1) + AC$

$A\bar{B} + AC$

$A(\bar{B} + C)$



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

2) $AB\bar{C} + \bar{A}\bar{B}C + ABC + \bar{A}BC + \bar{A}B\bar{C}$

$B\bar{C}(A + \bar{A}) + BC(A + \bar{A}) + \bar{A}\bar{B}C$

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

$B\bar{C} + BC + \bar{A}\bar{B}C$

$B(\bar{C} + C) + \bar{A}\bar{B}C$

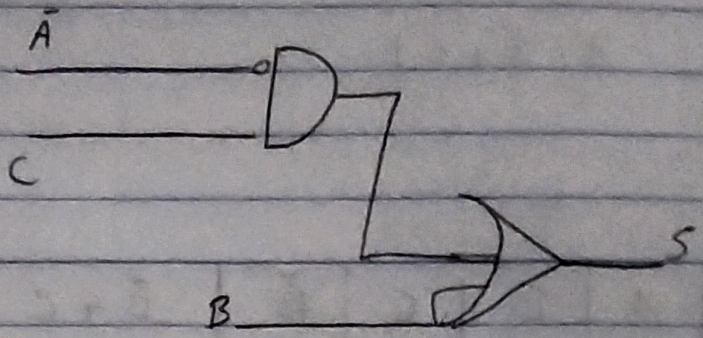
$B(1) + \bar{A}\bar{B}C$

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

$(B + \bar{A})(B + \bar{B})(B + C)$

$B + \bar{A}C$

$\bar{A}C + B$



A	B	C	Ā	ĀC	ĀC + B
0	0	0	1	0	0
0	0	1	1	1	1
0	1	0	1	0	1
0	1	1	1	1	1
1	0	0	0	0	0
1	0	1	0	0	0
1	1	0	0	0	1
1	1	1	0	0	1

3- $C(AC)' + B + D)' + C(A(CD)'$

$((A+C) + \bar{B} + \bar{D} + C(\bar{A} + \bar{C} + \bar{D})$

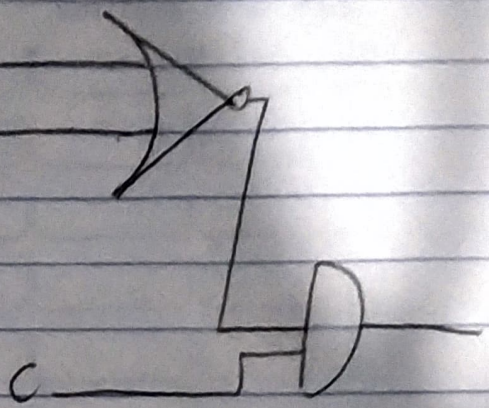
$((A+C) + \bar{B} + \bar{D} + C\bar{A} + C\bar{C} + C\bar{D}$

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

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

$\bar{A}C + C\bar{D}(1)$

$C(\bar{A} + \bar{D})$



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