Full Adder(Sumador Completo)

a	b	c_{in}	z	c_{out}
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	1
1	0	0	1	0
1	0	1	0	1
1	1	0	0	1
1	1	1	1	1

Z= $\bar{a}.\bar{b}.c_{in} + \bar{a}.b.\bar{c}_{in} + a.\bar{b}.\bar{c}_{in} + a.b.c_{in}$

Z=(a ^ b) ^ c_{in}

C_{out}= $\bar{a}.b.c_{in} + a.\bar{b}.c_{in} + a.b.\bar{c}_{in} + a.b.c_{in}$

C_{out}=(a ^ b) ^ a . b