Exemplo: Converta 123 para a base binária:

123	2
1	61

61	2
1	30

30	2
0	15

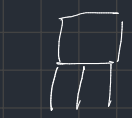
15	2
1	7

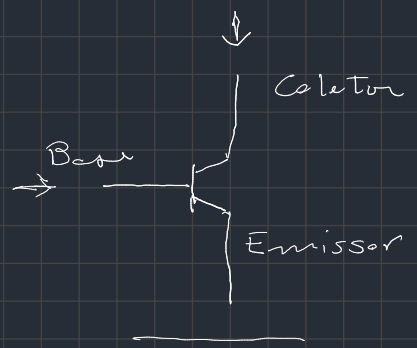
7	2
1	3

3	2
1	1

1	2
1	0

1 1 1 1 0 1 1





Verdadeira (V)

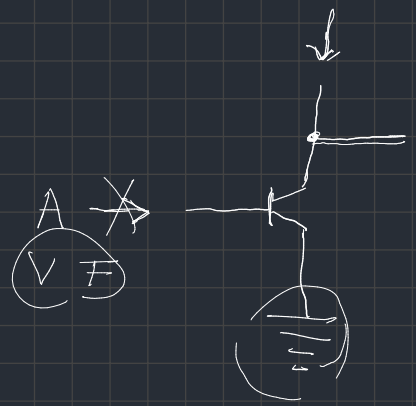
0 1

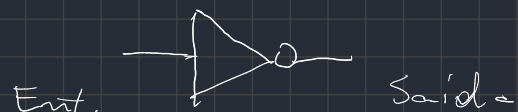
Falso (F)

Portas lógicas

Não (Not)

Entrada	Saída
V	F
F	V

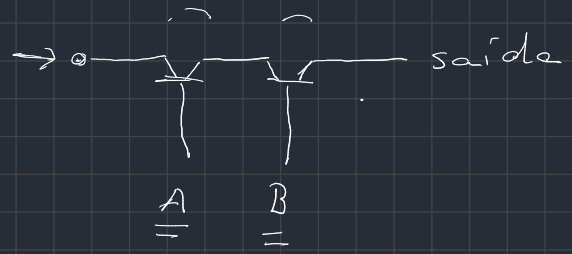


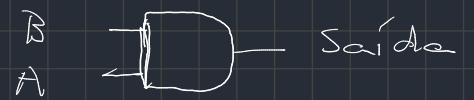


E And

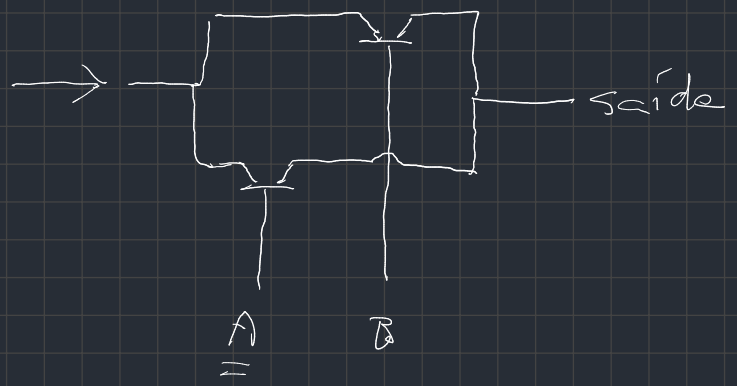
Entradas

A	B	Saída
V	V	V
V	F	F
F	V	F
F	F	F

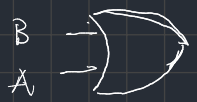




Ou (OR)

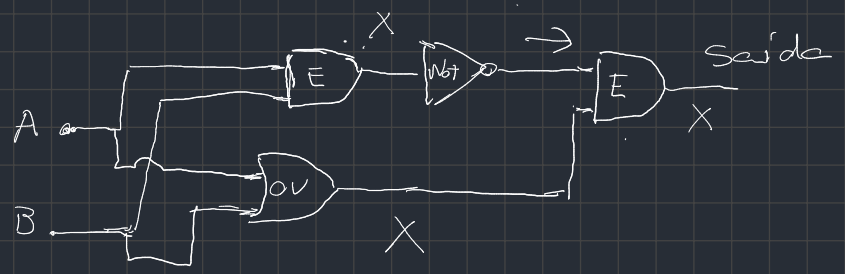


Entradas A	Entradas B	Saída
V	V	V
V	F	V
F	V	V
F	F	F



Ou exclusivo XOR

Entradas A	Entradas B	Saída
V	V	F
V	F	V
F	V	V
F	F	F



1 1
1 9 7

0 4 5

2 4 2

	0	1
0	0	1
1	1	10_b

C_{OUT}

1 1 1

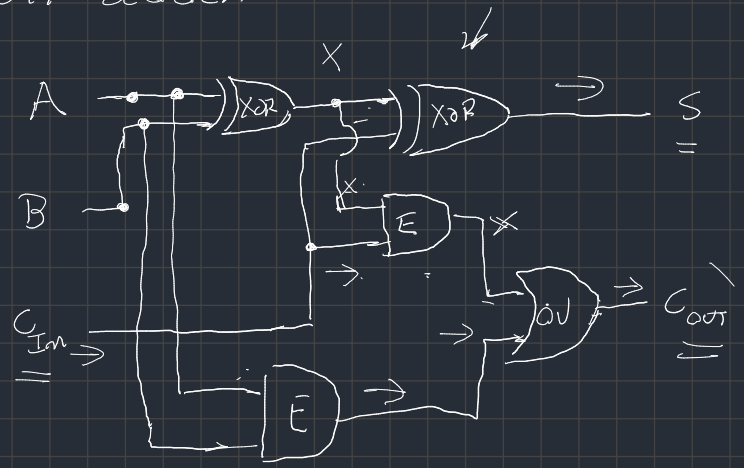
1 0 1

0

10_b = = $11_b = 3_d$

= =

Full adden



A	B	C_{IN}	S	C_{OUT}
0	0	0	0	0
1	0	0 ←	1	0
0	1	0		
0	0	1		
1	1	0		
1	0	1 ←	0	1
0	1	1		
1	1	1	1	1

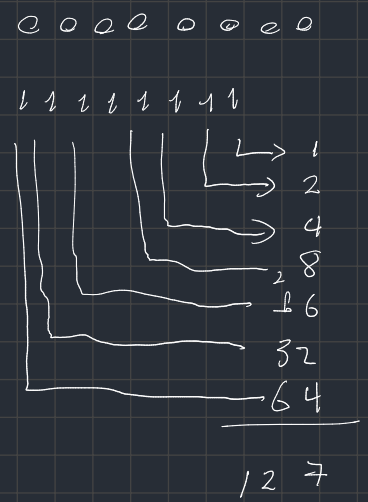
1 1 1 0 1 1

1

1 1

1 1

0


1 1 1 1 1 1 1 1
1
2
4
8
16
32
64
127