

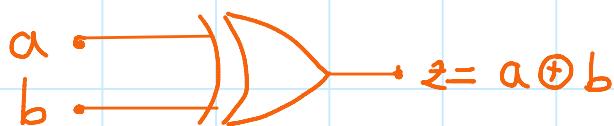
8. XOR

martedì 14 aprile 2020 16:42

XOR (OR ESCLUSIVO)

a	b	$a \oplus b$
0	0	0
0	1	1
1	0	1
1	1	0

$$a \oplus b = a\bar{b} + \bar{a}b$$

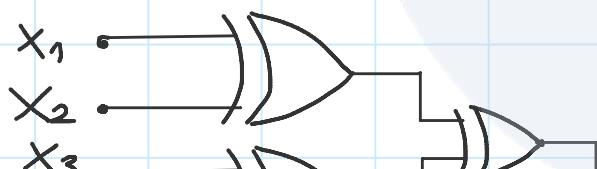


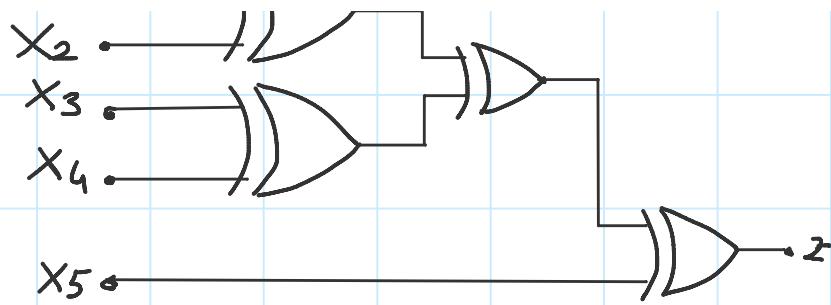
Proprietà associativa

$$a \oplus (b \oplus c) = (a \oplus b) \oplus c$$

Inoltre:

$x_1 \oplus x_2 \oplus \dots \oplus x_n \equiv$ generatore di parità





$$z = ((x_1 \oplus x_2) \oplus (x_3 \oplus x_4)) \oplus x_5$$

(questo circuito richiede
16 porte AND e una porta
OR a 16 ingressi, a 2 livelli)

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