XOR

xor

NOTATIONS:

$x \oplus y$

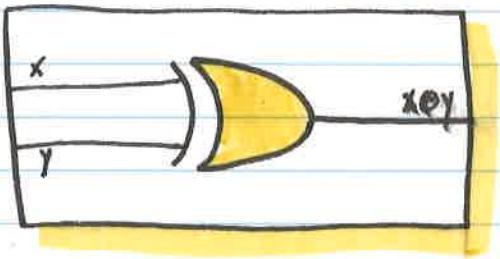
$x \veebar y$

(xor x y)-racket

x	y	$x \oplus y$
0	0	0
0	1	1
1	0	1
1	1	0

OPERATION:

THE EXCLUSIVE OR. APPLIES WHEN ONE VARIABLE IS TRUE, BUT NOT BOTH.



COMPOSED OF SMALLER GATES:

$a \oplus b$ is equivalent to $(a \wedge b') \vee (a' \wedge b)$

YOU CAN SEE THE CIRCUIT DIAGRAM BELOW