nand

NOTATIONS:

$\neg(x \wedge y)$

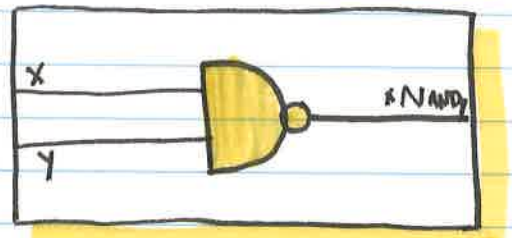
$x' \vee y'$

(nand x y) - racket

x	y	x NANDy
0	0	1
0	1	1
1	0	1
1	1	0

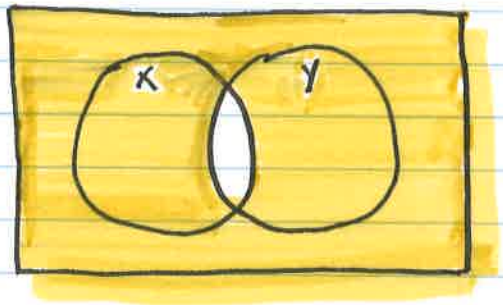
OPERATION:

THE SAME AS NOT AND. JUST AND BUT NEGATED ONLY FALSE WHEN BOTH INPUTS ARE TRUE.

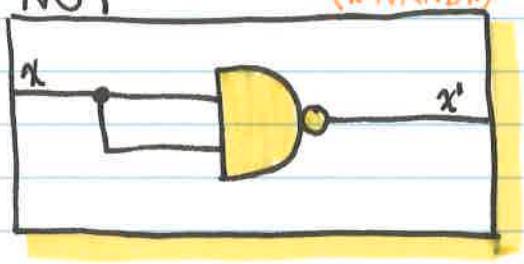


UNIVERSAL GATE:

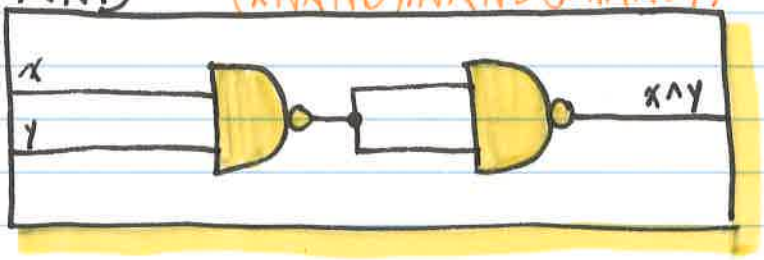
DUE TO DEMORGANS LAW NAND FUNCTIONS AS A UNIVERSAL GATE, MEANING ALL GATES CAN BE CONSTRUCTED USING NAND.



NOT (x NAND x)



AND (x NAND y) NAND (x NAND y)



OR (x NAND x) NAND (y NAND y)