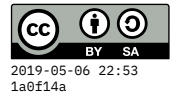


Quiz 3

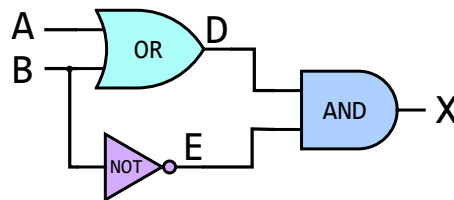
6 March 2019



Time limit is 20 minutes. You may use a calculator, but no book, notes, or communication.

Questions

- Complete the truth table that corresponds to the following circuit. What would be the value of X in each row?



A	B	$E=B'$	$D=A+B$	$X=D \cdot E$
0	0	_____	_____	_____
0	1	_____	_____	_____
1	0	_____	_____	_____
1	1	_____	_____	_____

- For any Boolean values X and Y, can $(X \cdot Y)'$ be rewritten as $X' \cdot Y'$? yes/no

Justify your answer by creating a truth table to show the results of the two expressions for all possible values of X and Y. As a reminder, the order of operations is that parentheses precede NOT, which precedes AND.