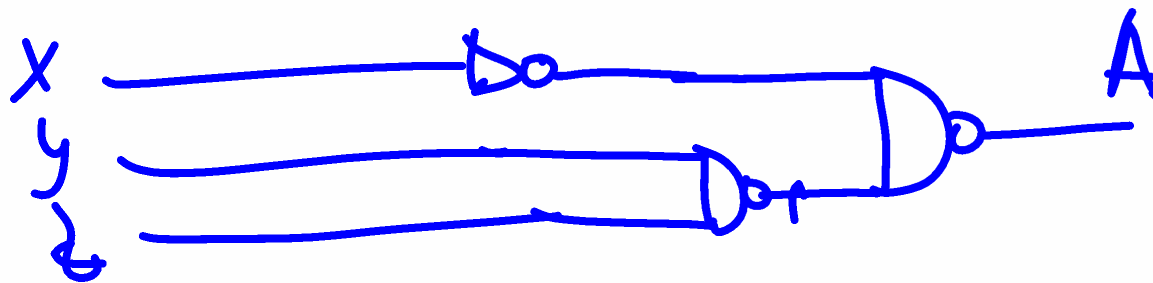


Question 1 Draw diagram of the following expression A:

$$A \equiv (\text{NOT } x) \text{ NAND } (y \text{ NAND } z)$$

Sol:



Fri 26 Oct 2018

Question: Write the TT of the previous diagram

Sol

X	y	z	A
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	1

How many $\neq$ input combinations do we have? $8 = 2^3$

#input

X	y	z	v

$\rightarrow 16 = 2^4$

#input,

GRAPH (diagram, geometric, plot, ...)
circuits

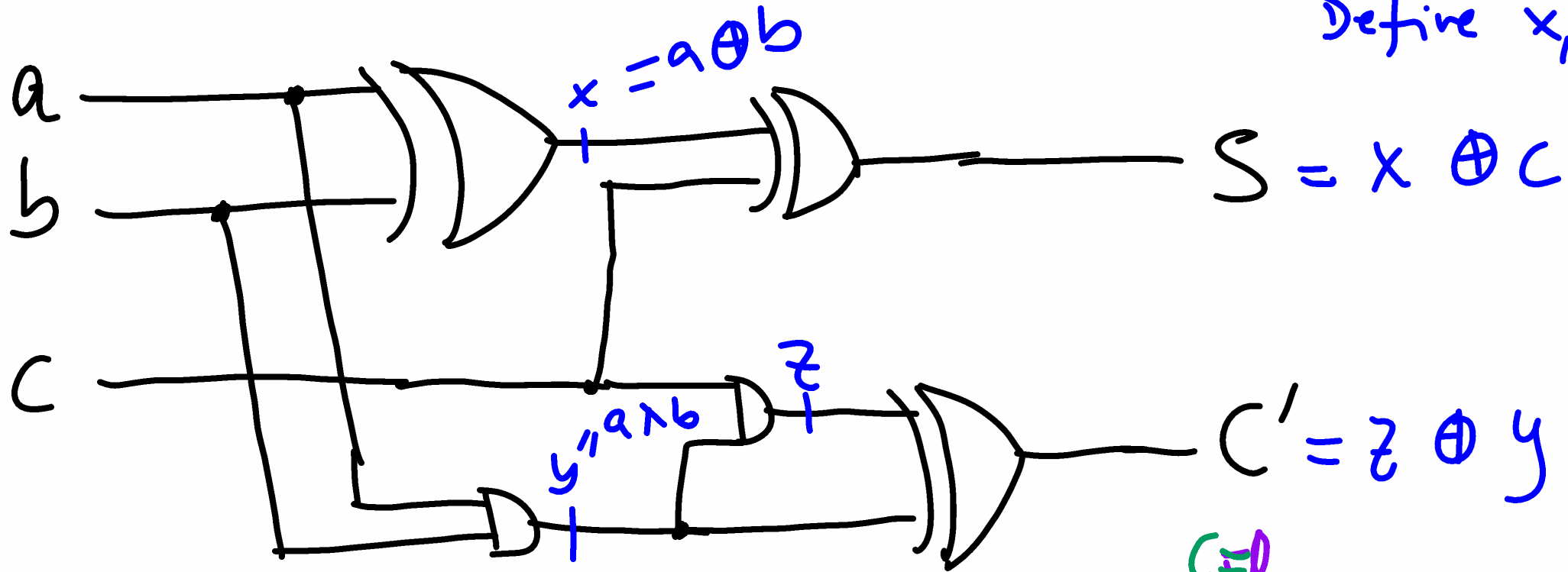
How we
learn

English
(words, concepts,
summaries, ...)

Formula (equations, algebra, logic gates, ...)
procedure
AND, XOR, ...

Write the Truth table

Divide 2 longer:
Define x, y, z



$C=1$
 $1=a$
 $0=b$

$C=0$	$0=S$
-------	-------

$C=0$
 $0=a$
 $1=b$

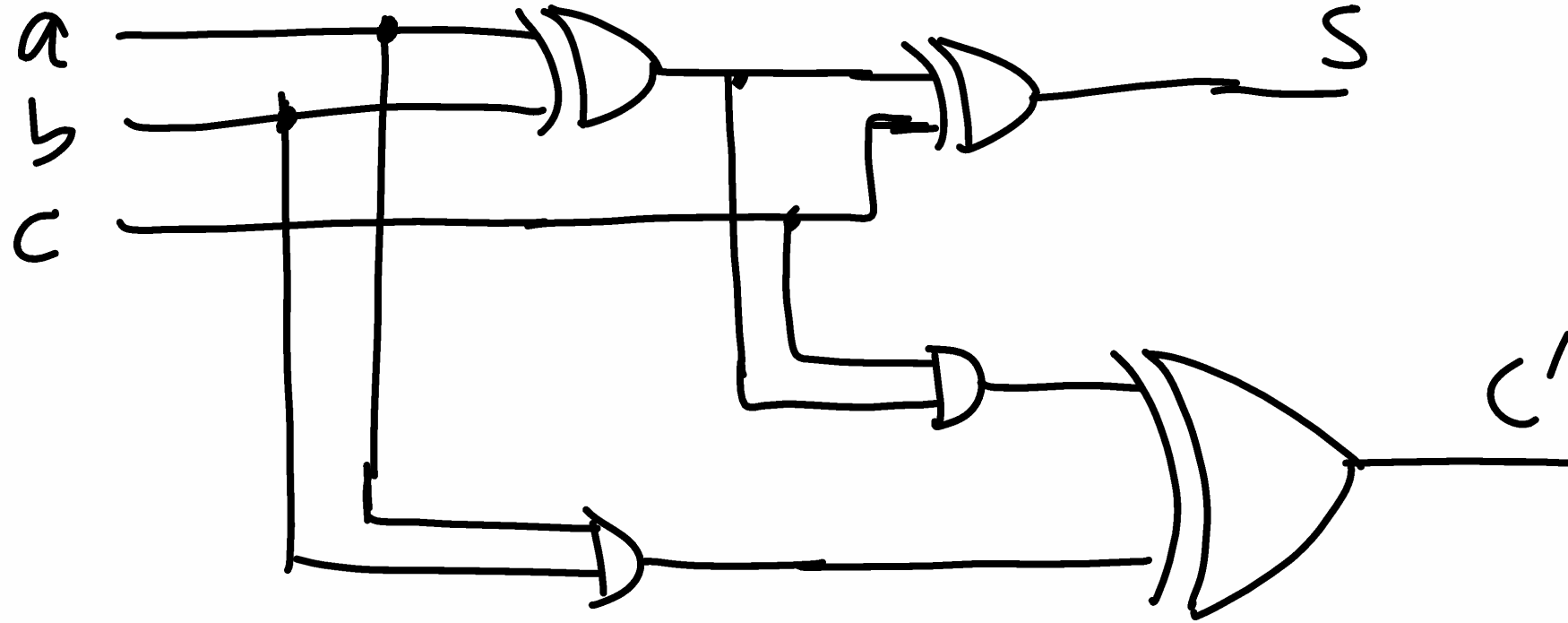
$C'=0$	$1=S$
--------	-------

$C=0$
 $1=a$
 $1=b$

$C'=1$	$0=S$
--------	-------

$a \wedge b$ is
Shorthand for
or AND b

ASSIGNMENT : 1) WRITE the truth table 2) Complete the forms for all cases



$$\begin{array}{rcl} C & = & a \\ & & = b \\ \hline C & = & S \end{array}$$

3) Explain the output