ERT-7

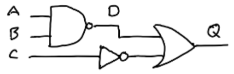
Oppg 1

A	B	C	$A \cdot B$	D	$\bar{C}$	Q
0	0	0	0	1	1	1
0	0	1	0	1	0	1
0	1	0	0	1	1	1
0	1	1	0	1	0	1
1	0	0	0	1	1	1
1	0	1	0	1	0	1
1	1	0	1	0	1	1
1	1	1	1	0	0	0

Tabell 1: Sannhetstabell for NAND3

A	B	C	Q
0	0	0	1
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	0

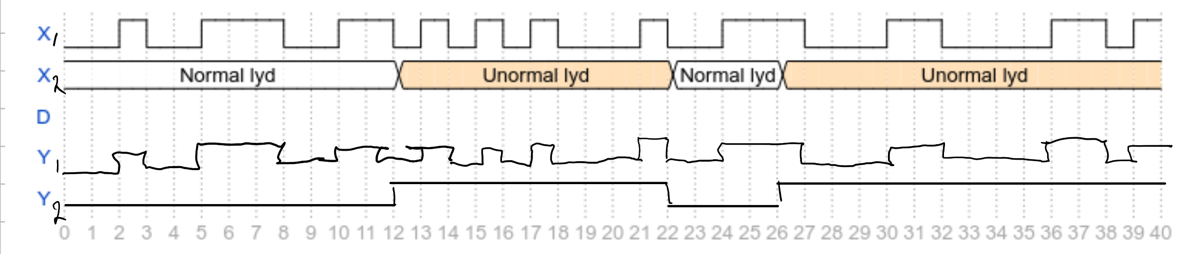
Oppgave 1 Vis at kretsen i Figur 2 er en gyldig realisering av NAND3.



Figur 2: Mulig realisering av NAND3

Du kan enten vise dette ved hjelp av boolsk algebra, eller du kan gjøre det ved å vise at kretsen oppfyller sannhetstabellen. Dersom du bruker tabell-metoden kan det være lurt å innføre en hjelpevariabel D som vist i figuren for lettere å holde orden i tankegangen.

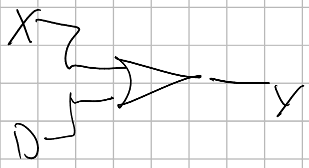
Oppg 5



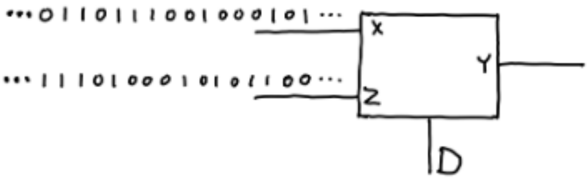
Oppg 6

X	D	Y
0		0
1		1

Oppg 7



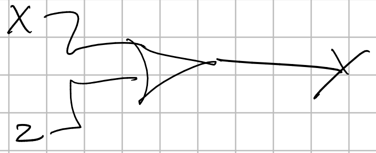
Oppg 9



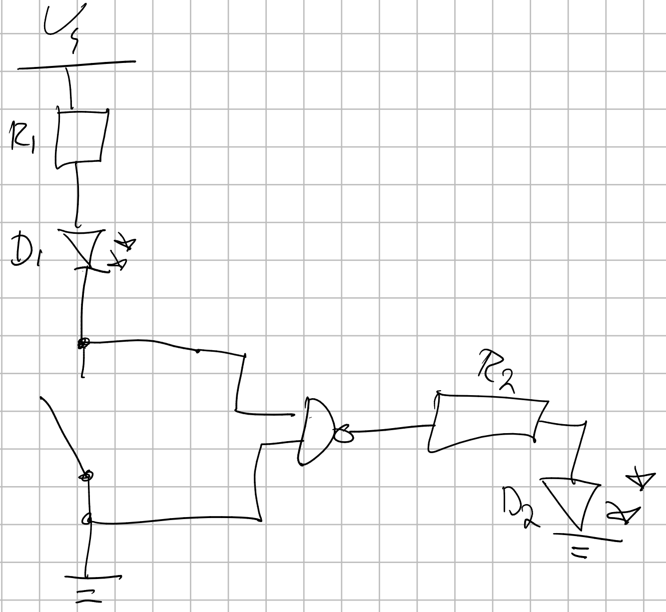
X	Z	Y
0	0	0
0	1	1
1	0	1
1	1	1

$X + Z = Y$

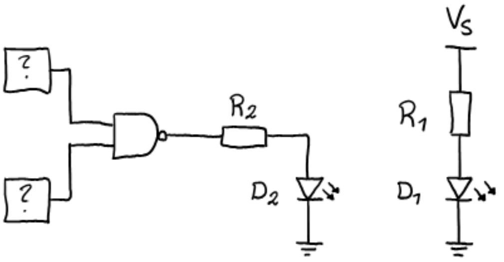
Oppg 10



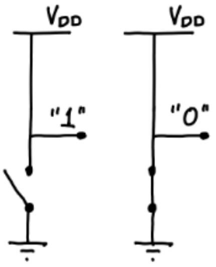
Oppg 16



Funka ikke



Figur 14: Testoppsett for NAND-port.



(b)

Forsok 2