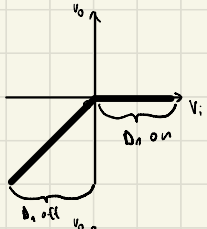
Exercise 4.

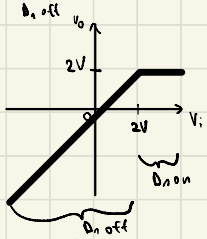
Robert Jahnke

9.

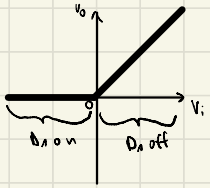
a)



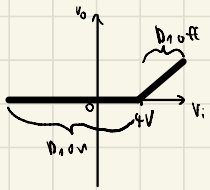
b)



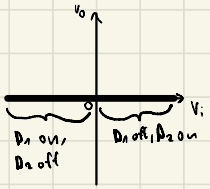
c)



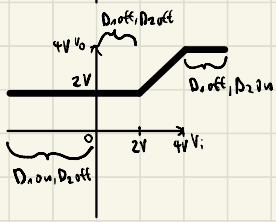
d)



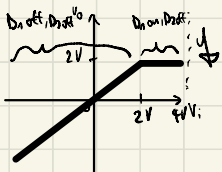
e)



f)



g)

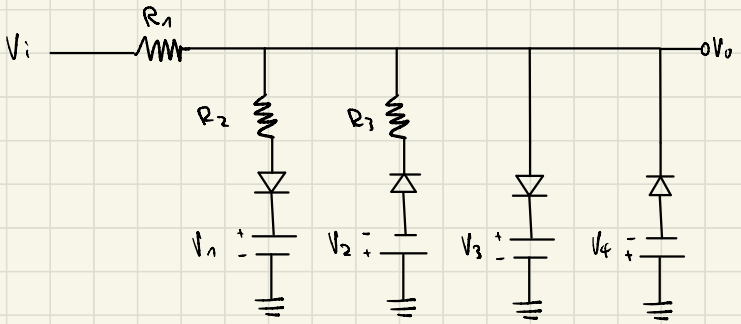


D_1 on, if: $V_{in} > 2V$

D_2 on, if: $V_{in} > 4V$ ⇒ If $V_{in} > 4V$: $V_{in} = 2V \neq 4V$ ↯

This circuit is not functional

10.



$V_1 = V_2 = 2V$; $V_3 = V_4 = 4V$

$\frac{R_2}{R_2+R_1} = \frac{R_3}{R_3+R_1} = \frac{1}{2}$ $\Rightarrow$ For example : $R_1 = R_2 = R_3 = 1k\Omega$