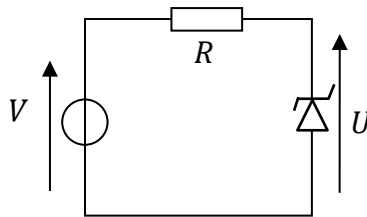




TD3 : ZENER DIODES

Exercise 1

Find and plot the shape of the transfer characteristic of the circuit below. Use the real model for the diode.

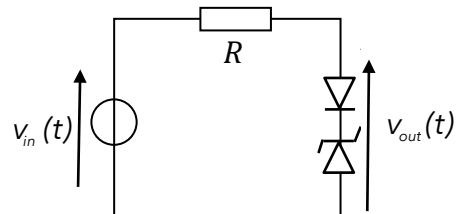


Exercise 2

In the diagram opposite, $v_{in}(t) = V \cdot \sqrt{2} \cdot \sin(\omega t)$:

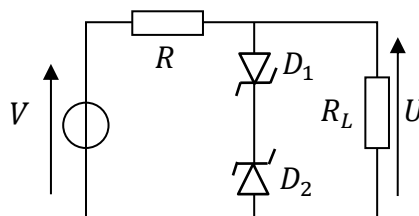
Plot the shape of $v_{out}(t)$

We have $V_0 = 0,7V$ et $V_Z = 4,3V$



Exercise 3

Find and plot the characteristic transfer of the circuit below. We will use the real models of each of the diodes.



$$R = 560\Omega, R_L = 2k\Omega, r_D = 20\Omega, V_0 = 0,6V, r_Z = 8\Omega, V_Z = 9V$$