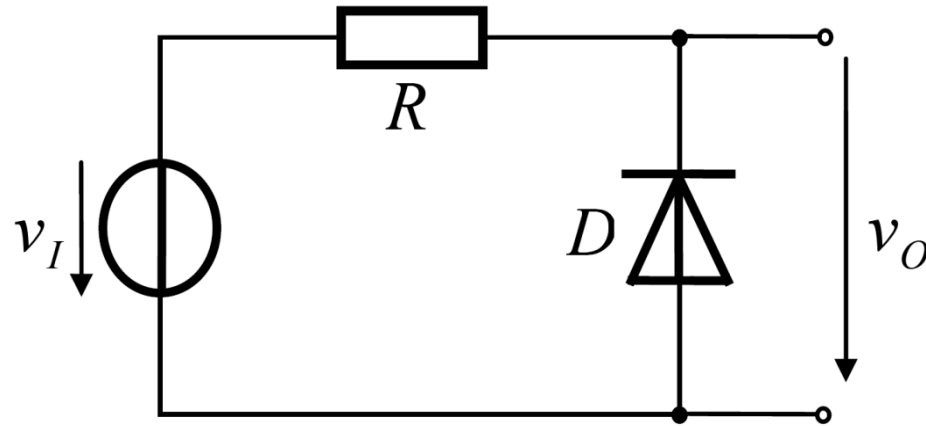


## Homework 1 – DR switching circuits



For the circuit in the figure,  $R = 10 \text{ k}\Omega$ .

- Deduce and plot the VTC  $v_O(v_I)$ .
- $v_O(t)$  and  $v_R(t)$  and  $i(t)$ , if  $v_I(t)$  is a triangular wave with 7.5 V amplitude;
- What are the values of the maximum reverse voltage  $v_{DR}$  across  $D$  and the maximum forward current through  $D$ ?