

### Problem 1

For the circuit shown, assume that the diodes are ideal. Use the method of assumed states to:

- graph  $v_{OUT}$  as a function of  $v_{IN}$ ;
- find and sketch the output if the input is  $v_i(t) = A \sin(t)$ , where  $A > V_{R1}$  and  $A > V_{R2}$ .

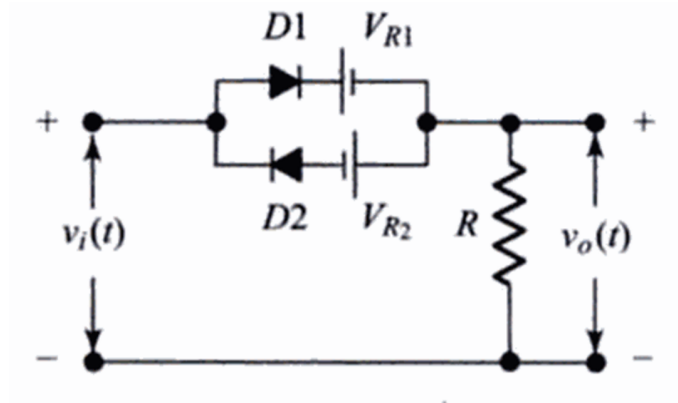


Figure 1