

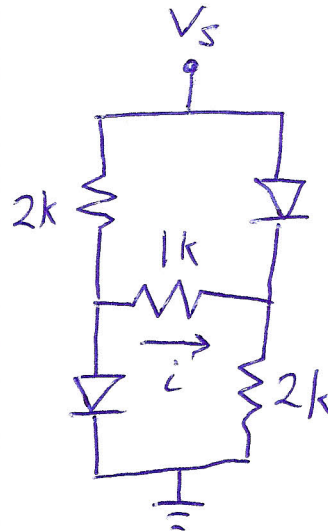
Don't Forget:

- Assume all diodes are standard Silicon type, with  $V_{D0}=0.7$  V. All Zener diodes have  $V_Z=5$  V
- Be sure to include units for all numerical results
- Label all relevant values on plots

Question 1

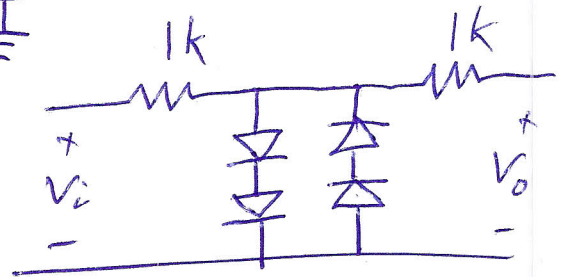
For the circuit shown, find the current  $i$ , for

- $V_S=1$  V
- $V_S=2$  V

Question 2

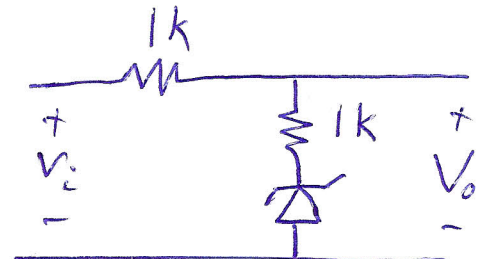
For the circuit shown,

- Write the transfer function ( $V_o$  for all  $V_i$ )
- Sketch the transfer function  $V_o$  vs  $V_i$  on a rectangular plot

Question 3

For the circuit shown,

- Write the transfer function ( $V_o$  for all  $V_i$ )
- Sketch the transfer function  $V_o$  vs  $V_i$  on a rectangular plot

Question 4

For an input signal of a 1 MHz sine wave with a 10 V magnitude, sketch the output voltage for

- $R=10\ \Omega$
- $R=1\text{ k}\Omega$
- $R=100\text{ k}\Omega$

