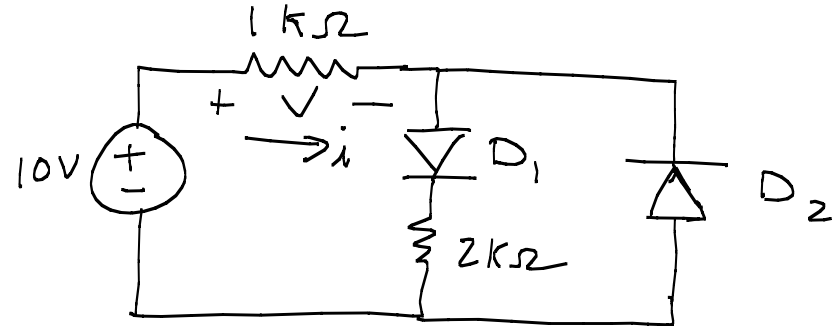


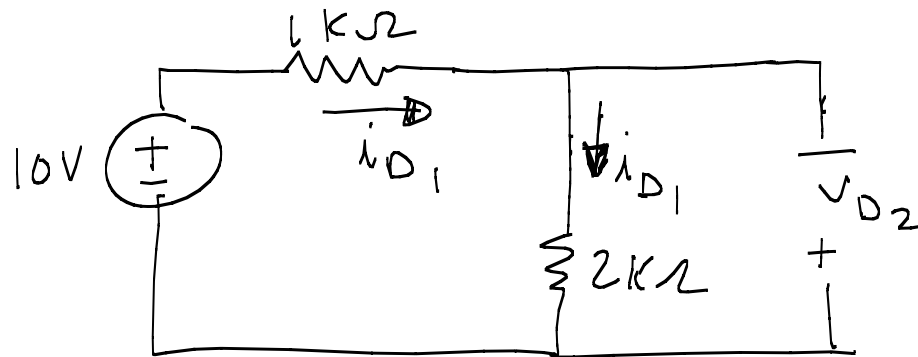
Problem 1

Determine: i & V



Assumed State

$D_1 = \text{ON}$, $D_2 = \text{OFF}$



KVL (Left)

$$-10V + (1k\Omega) i_{D1} + (2k\Omega) i_{D1} = 0$$

$$i_{D1} = 3.33\text{mA} > 0 \quad \underline{\text{OK}}$$

KVL (Right)

$$-(3.33\text{mA})(2\text{k}\Omega) - V_{D_2} = 0$$

$$V_{D_2} = -6.67\text{V} < 0 \quad \underline{\text{OK}}$$

$$D_1 = \text{ON}, D_2 = \text{OFF}$$

$$i = i_{D_1} = 3.33\text{mA}$$

$$V = (3.33\text{mA})(1\text{k}\Omega) = 3.33\text{V}$$