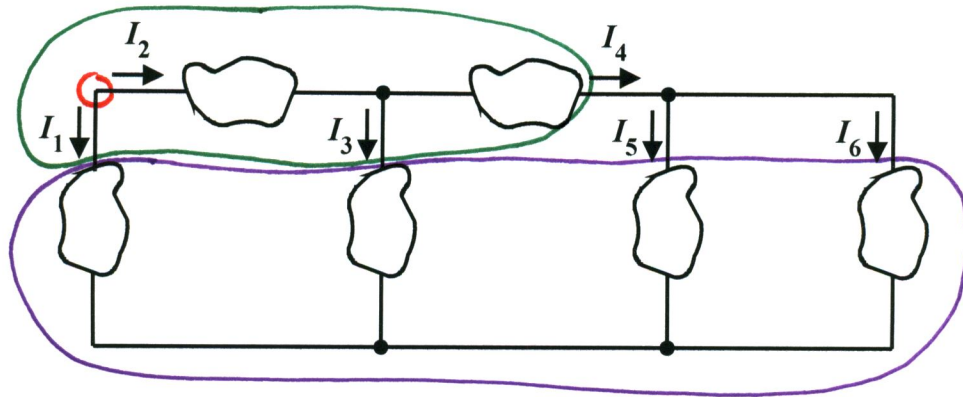


EE 2240
Problem #06

Given $I_1 = -1\text{ mA}$, $I_3 = 0.5\text{ mA}$, and $I_6 = 0.2\text{ mA}$, find I_2 , I_4 and I_5 .



$$I_1 + I_2 = 0 \Rightarrow I_2 = -I_1 = -(-1\text{ mA}) = 1\text{ mA}$$

$$\begin{aligned} I_1 + I_3 + I_4 &= 0 \Rightarrow I_4 = -I_1 - I_3 \\ &= -(-1\text{ mA}) - (0.5\text{ mA}) \\ &= 0.5\text{ mA} \end{aligned}$$

$$\begin{aligned} I_1 + I_3 + I_5 + I_6 &= 0 \\ \Rightarrow I_5 &= -I_1 - I_3 - I_6 \\ &= -(-1\text{ mA}) - 0.5\text{ mA} - 0.2\text{ mA} \\ &= 0.3\text{ mA} \end{aligned}$$