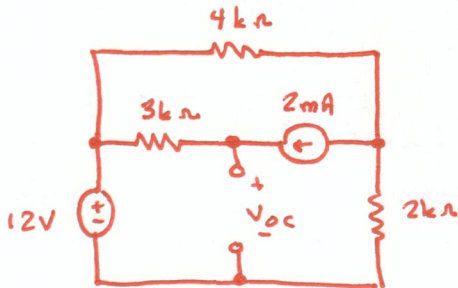
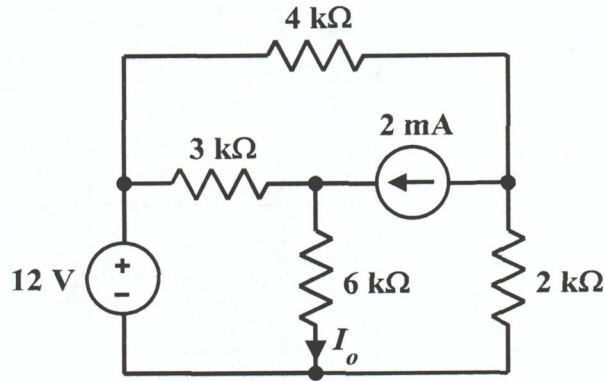
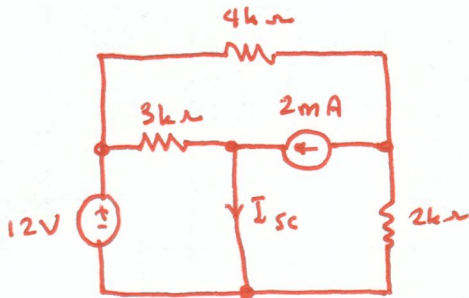


EE 2240  
**Problem #01**

Find  $I_o$  using Thévenin's Theorem.



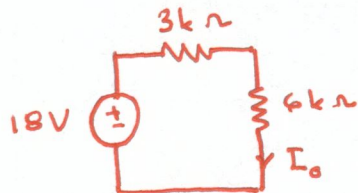
$$V_{oc} = 12V + (3k\Omega)(2mA) = 18V$$



$$I_{sc} = 2mA + \frac{12V}{3k\Omega} = 6mA$$

$$\therefore V_T = 18V$$

$$R_T = \frac{18V}{6mA} = 3k\Omega$$



$$I_o = \frac{18V}{3k\Omega + 6k\Omega} = 2mA$$