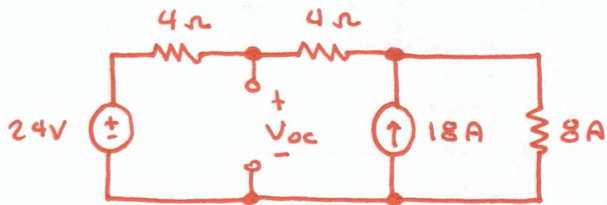
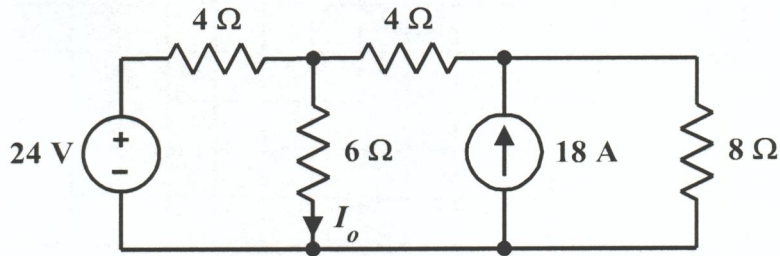


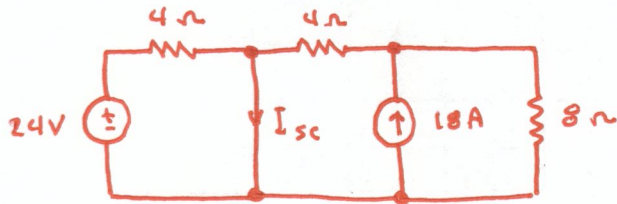
EE 2240  
**Problem #02**

Use Norton's theorem to find  $I_o$ .



$$V_{oc} = \frac{12}{16} (24V) + (4\Omega) \frac{1}{2} (18A)$$

$$= 54V$$

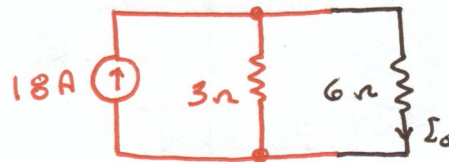


$$I_{sc} = \frac{24V}{4\Omega} + \frac{18}{12} (18A)$$

$$= 18A$$

$$I_N = I_{sc} = 18A$$

$$R_N = \frac{V_{oc}}{I_{sc}} = \frac{54V}{18A} = 3\Omega$$



$$I_o = \frac{3}{3+6} (18A) = 6A$$