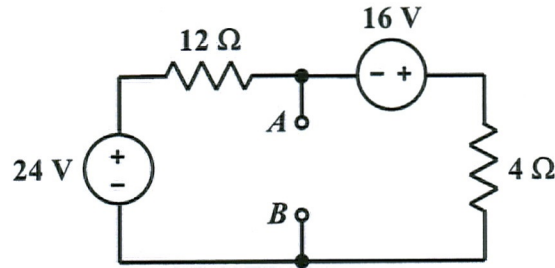
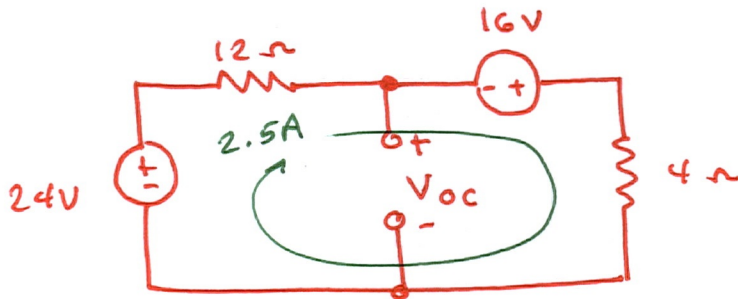


EE/EET 2240  
**Homework Problem #27**



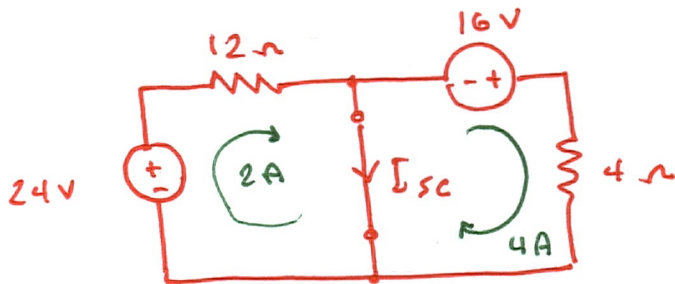
Find and sketch the Thévenin equivalent circuit with respect to terminals *A* and *B*.



$$V_{oc} = (24V) - (12\Omega)(2.5A) = -6V$$

or

$$V_{oc} = (-16V) + (4\Omega)(2.5A) = -6V$$



$$I_{sc} = 2A - 4A = -2A$$

$$V_T = V_{oc} = -6V$$

$$R_T = \frac{V_{oc}}{I_{sc}} = \frac{-6V}{-2A} = 3\Omega$$

∴ the Thévenin equivalent circuit is:

