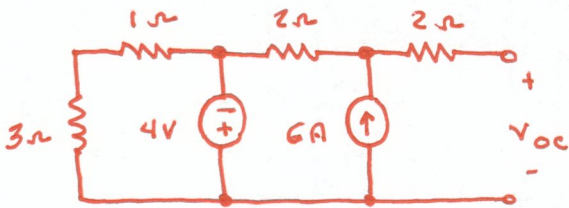
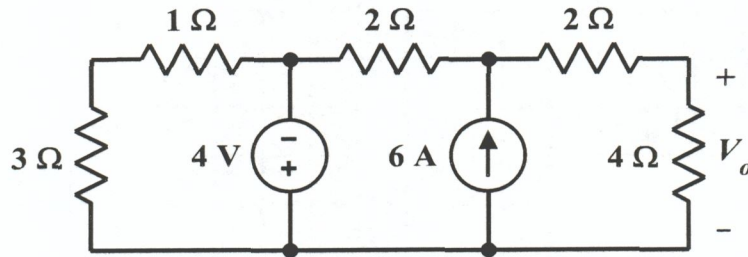
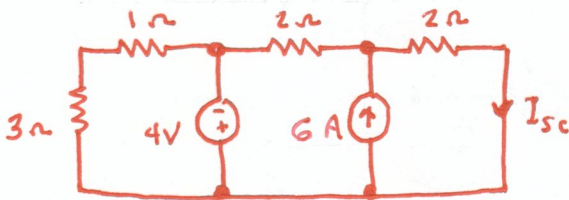


EE 2240
Problem #02

Treat the $4\ \Omega$ resistor as the load, and use Thévenin's theorem to find V_o .



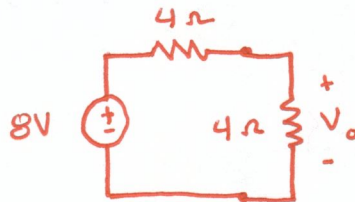
$$V_{oc} = -4V + (2\ \Omega)(6A) = 8V$$



$$I_{sc} = \frac{1}{2}(6A) - \frac{4V}{4\ \Omega} = 2A$$

$$V_T = V_{oc} = 8V$$

$$R_T = \frac{V_{oc}}{I_{sc}} = \frac{8V}{2A} = 4\ \Omega$$



$$V_o = \frac{4}{8+4}(8V) = 4V$$