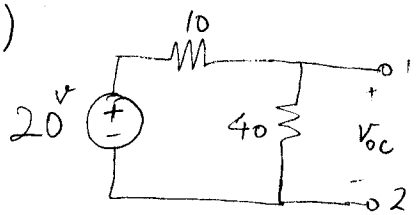
Thevenin/Norton in a different way with V_{Th}/I_{sc}:

4.33:

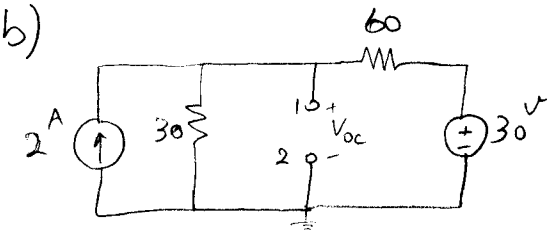
a)



$$V_{Th} = V_{oc} = 20\,\frac{40}{40+10} = 16\ V$$

$$I_{sc} = \frac{20}{10} = 2 \quad \hookrightarrow \quad R_{Th} = \frac{V_{Th}}{I_{sc}} = \frac{16}{2} = 8\,\Omega$$

b)

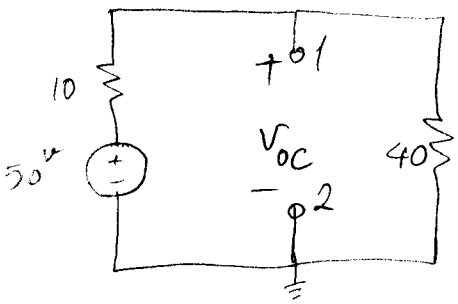


$V_{Th} = V_{oc}$:

$$2 - \frac{V_{oc}}{30} - \frac{(V_{oc} - 30^{V})}{60} = 0 \Rightarrow \boxed{V_{oc} = 50^{V} = V_{Th}}$$

$$I_{sc} = 2^{A} + \frac{30^{V}}{60} = 2.5^{A} \Rightarrow \boxed{R_{Th} = \frac{V_{Th}}{I_{sc}} = \frac{50^{V}}{2.5^{A}} = 20\,\Omega}$$

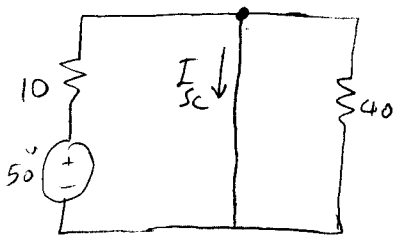
4.36:



V_{oc}: $V_{oc} = V_{Th}$

$$\frac{(V_{oc} - 50)}{10} + \frac{(V_{oc} - 0)}{40} = 0 \Rightarrow \boxed{V_{oc} = 40^{V} = V_{Th}}$$

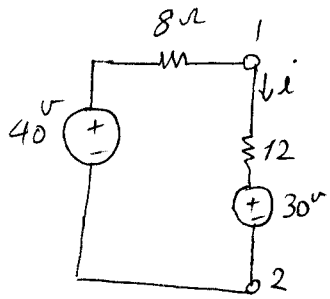
I_{sc}:



$$I_{sc} = \frac{50^{V}}{10} = 5A$$

$$\Rightarrow \boxed{R_{Th} = \frac{V_{Th}}{I_{sc}} = \frac{40^{V}}{5A} = 8\,\Omega}$$

$\rightarrow$



$$\boxed{i = \frac{40^{V} - 30^{V}}{8+12} = \frac{10^{V}}{20^{\Omega}} = 0.5A = 500\ mA}$$