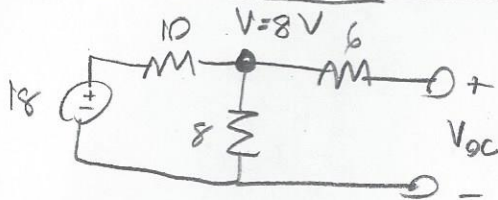
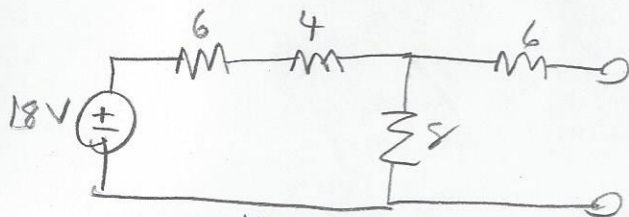
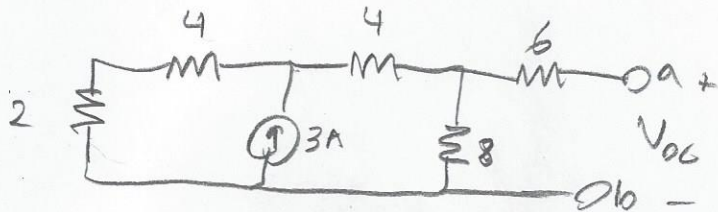
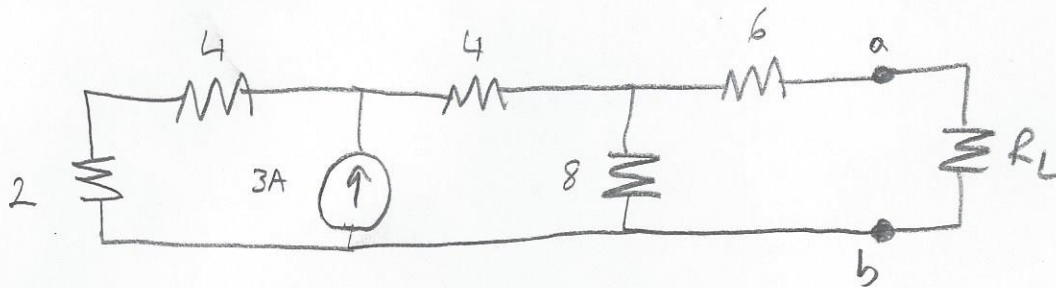


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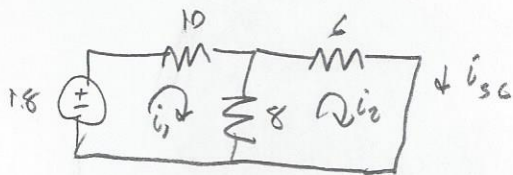
$$V_{oc} = 8V = V_{th}$$

$$P_{max} = 18W$$

$$-18 + 18i = 0$$

$$i = 1A$$

$$R_{th} = \frac{8V}{36/47A} = 10.44\Omega = R_L$$



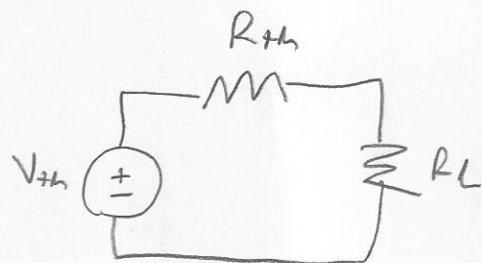
$$-18i_1 - 8i_2 = 18$$

$$-8i_1 + 14i_2 = 0$$

$$i_1 = 63/47A$$

$$i_2 = 36/47A$$

$$i_{sc} = 36/47A$$



a)

$$P_{max} \text{ when } R_L = R_{th}; \quad R_L = 10.44\Omega$$

$$b) \quad P_{max} = \frac{V_{th}^2}{4R_{th}} = \frac{(8V)^2}{4(10.44\Omega)} = 1.53W$$