

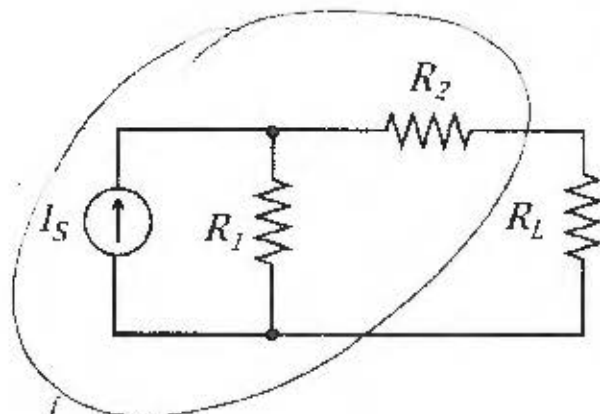
Find the  $R_L$  for maximum power transfer.

$$I_S = 4 \text{ A}$$

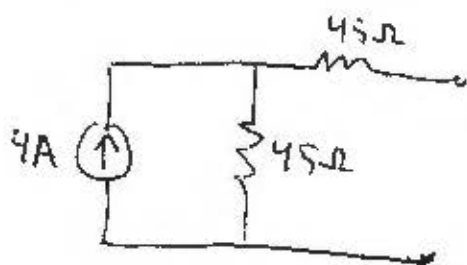
Given  $I_S$ , find the max power transferred to  $R_L$ .

$$R_1 = 45 \text{ ohm}$$

$$R_2 = 45 \text{ ohm}$$

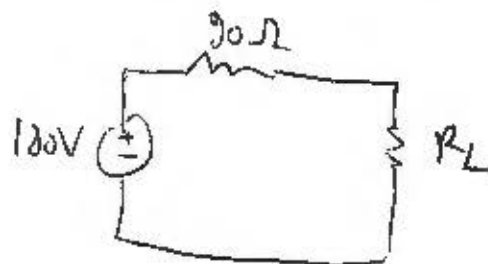


→ FIND THEVENIN MODEL



$$V_{oc} = 4 \cdot 45 = 180 \text{ V}$$

$$R_{TH} = 45 + 45 = 90 \Omega$$



FOR MAX POWER  
TRANSFER

$$R_L = R_{TH} = 90 \Omega$$

$$R_L = 90 \Omega$$

$$P = R_L \cdot I^2$$

$$I = \frac{180}{90 + R_L} = 1 \text{ A}$$

$$P_{MAX} = 90 \text{ W}$$