Ex:

a) Calculate the value of $R_{\mathrm{L}}$ that would absorb maximum power.
b) Calculate that value of maximum power $R_{\mathrm{L}}$ could absorb.

Sols:


Note: Circuit used to find max power value is shown below.

$$
\begin{aligned}
V_{\text {in }} & R_{\text {Th }} \\
P & =I \cdot V=I^{2} R \\
P & =\frac{V_{T h}^{2}}{\left(2 R_{m h}\right)^{2}} \cdot R_{T h} \\
P & =\frac{V_{T h}}{4 R_{T h}}
\end{aligned}
$$

