LE 2240

## Homework Problem \#048



Find the Thévenin equivalent circuit with respect to terminals $A$ and $B$.


$$
\begin{aligned}
& V_{x}=\frac{9}{10} \cdot 10 \mathrm{~V}=9 \mathrm{~V} \\
& V_{O C}=-2 V_{x}=-18 V \\
& V_{x}=\frac{9}{10} \cdot 10 \mathrm{~V}=9 \mathrm{~V} \\
& I_{s e}=-\frac{2 V_{x}}{300 n}=-60 m A \\
& V_{T}=V_{\text {OC }}=-18 V \\
& R_{T}=\frac{V_{O C}}{\Sigma_{S C}}=\frac{-18 \mathrm{~V}}{-60 \mathrm{~mA}}=300 \Omega \\
& 18 \mathrm{~V} \underbrace{300 R}_{-3}
\end{aligned}
$$

