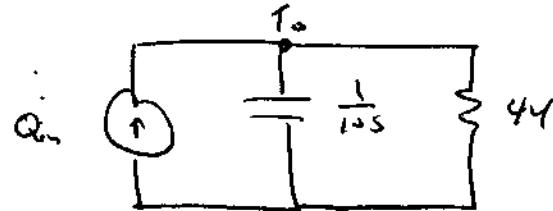
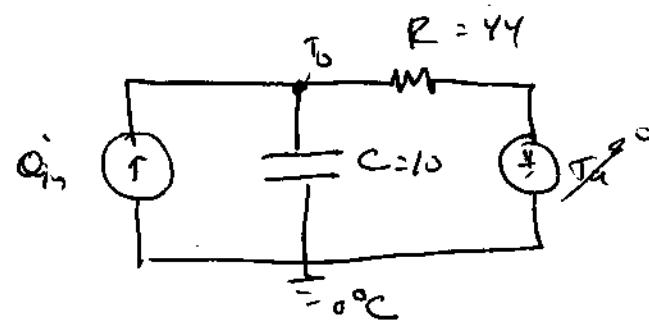


(a)



$$Z_L = \frac{\frac{44}{10s}}{44 + \frac{1}{10s}} = \frac{44}{440s + 1} \\ = \frac{\frac{1}{10}}{s + \frac{1}{440}}$$

$$\frac{T_o(s)}{Q_m(s)} = \frac{\frac{1}{10}}{s + \frac{1}{440}}$$

(b)

