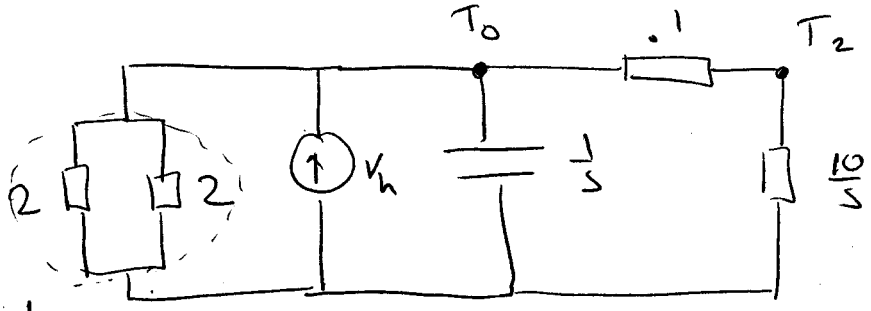
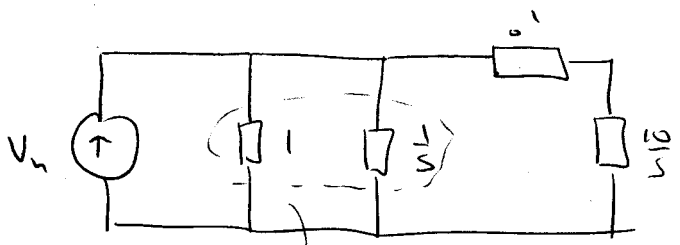
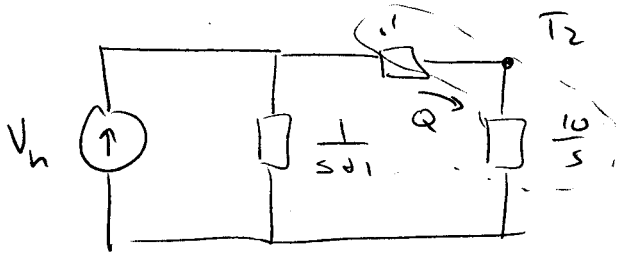
(a) to find $G(s)$, set $T_a = 0$



$R_{eq} = \frac{2 \cdot 2}{2+2} = 1$



$$Z_{eq} = \frac{\frac{1}{s}}{1+\frac{1}{s}} = \frac{1}{s+1}$$



$$Z_{eq2} = .1 + \frac{10}{s} = \frac{.1s+10}{s}$$

current divider: $$Q = \frac{\frac{s}{.1s+10}}{\frac{s}{.1s+10} + s + 1} \cdot V_h = \frac{s}{.1s^2 + 11.1s + 10} V_h$$

$$T_2 = \frac{10}{s} \cdot Q \qquad T_2(s) = \frac{10}{.1s^2 + 11.1s + 10} V_h(s)$$

$$G(s) = \frac{T_2(s)}{V_h(s)} = \frac{100}{s^2 + 111s + 100}$$