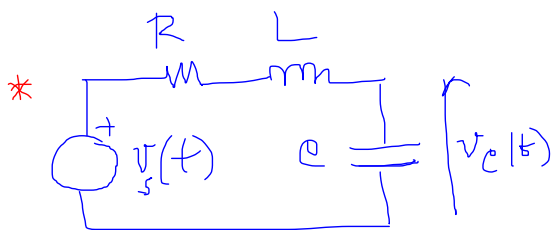
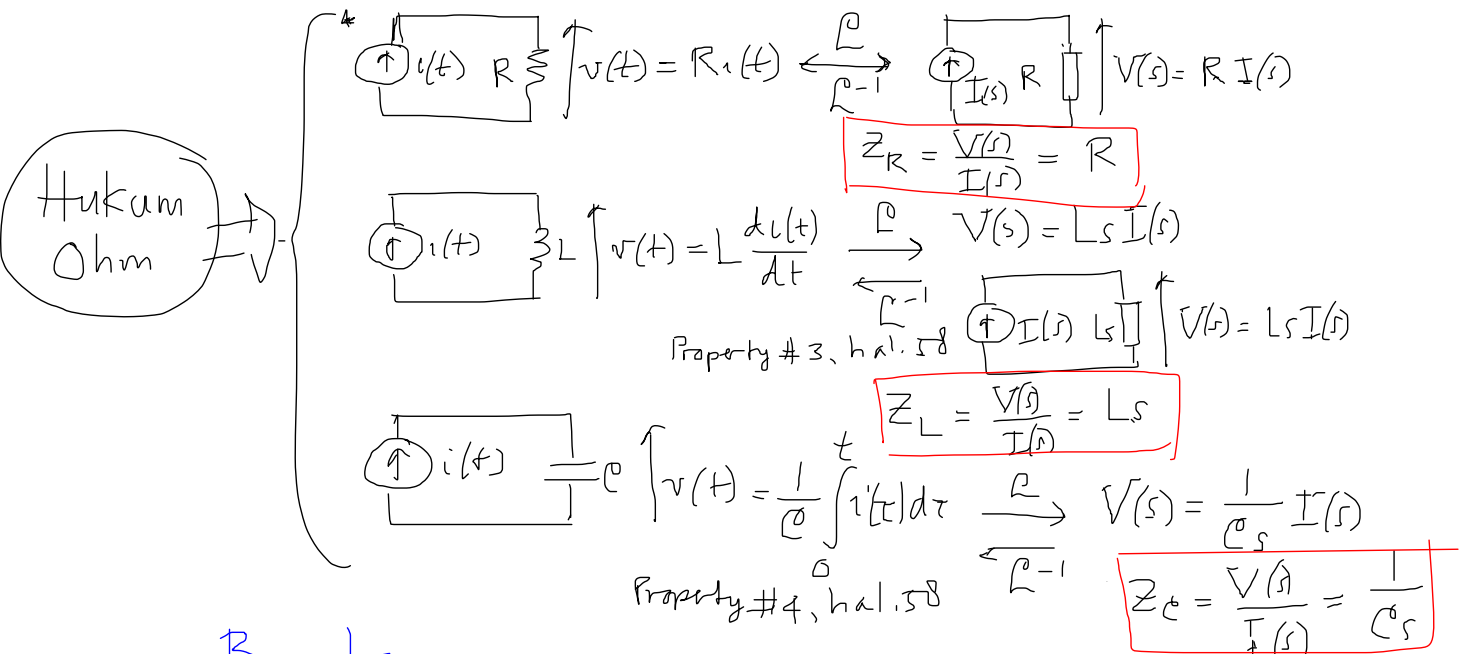


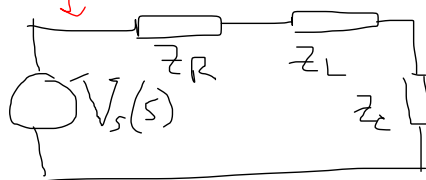
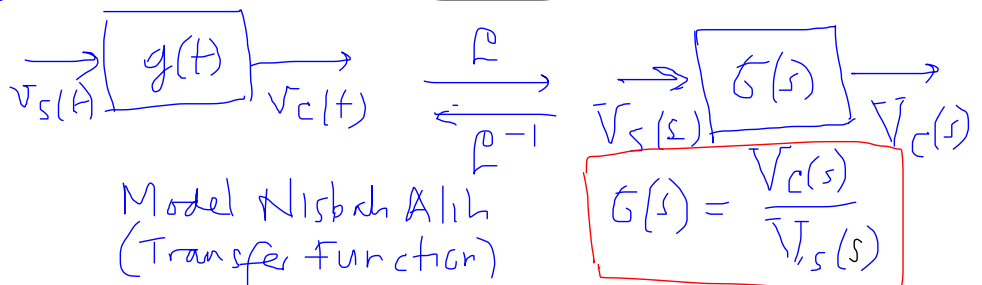
Dalam rangkaian listrik, Model Nisbah Alih digunakan dalam:

- * Analisis transient
- * Analisis 'steady state' (keadaan tunak)

* Contoh Elektrik Konsep Impedansi (Z)



Transf Laplace



$$V_c(s) = \frac{Z_C}{Z_R + Z_L + Z_C} V_s(s) = \frac{1/Cs}{R + Ls + 1/Cs} V_s(s)$$

$$= \frac{1}{LCs^2 + RCs + 1} V_s(s)$$

Misalnya,

Diketahui: $LC = 1$

$RC = 100 \text{ sec}$

maka:

$$G(s) = \frac{1}{s^2 + 100s + 1}$$

$$G(s) = \frac{\bar{v}_c(s)}{\bar{v}_s(s)} = \frac{1}{LCs^2 + RCs + 1}$$

$$g(t) = \mathcal{L}^{-1} G(s) = \mathcal{L}^{-1} \frac{1}{LCs^2 + RCs + 1}$$