

Laplace Transform

- Resistor of resistance $R \longrightarrow$ impedance of R
- Capacitor of capacitance $C \longrightarrow$ impedance of $\frac{1}{sC}$ constant voltage in the same direction as capacitor $\frac{v_c(0)}{s}$ basically represents the voltage drop you would get across the capacitor at $t = 0$
- Inductor of inductance $L \longrightarrow$ impedance of sL constant voltage opposing the voltage drop $Li_L(0)$, basically means in the same direction as current flow