

Study List for Quiz #2:

1. Capacitors (series/parallel combinations).
2. Inductors
3. RC Circuit transients (charging and discharging)
4. RL Circuit transients

Equation List: [units are in square brackets]

$$\begin{aligned} 1/C_s &= 1/C_1 + 1/C_2 + 1/C_3 + \dots & C_p &= C_1 + C_2 + C_3 + \dots \\ v_C &= Q/C \text{ [1 V=1 C/F]} & dv_C/dt &= i/C \\ v_L &= L(di/dt) \text{ [1 V = 1 H} \cdot \text{ A/s]} & \mathbf{t}_{RC} &= RC \text{ [1 s =1 } \Omega \cdot F] \\ & & \mathbf{t}_{RL} &= L/R \text{ [1 s=1 H/}\Omega] \end{aligned}$$