

$$V_0 = V_R + V_C$$

$$V_0 = iR + \bullet$$

$$\begin{aligned} I &= \frac{\Delta Q}{\Delta t} = C \frac{\Delta V}{\Delta t} \\ &= C \frac{dV}{dt} \end{aligned}$$

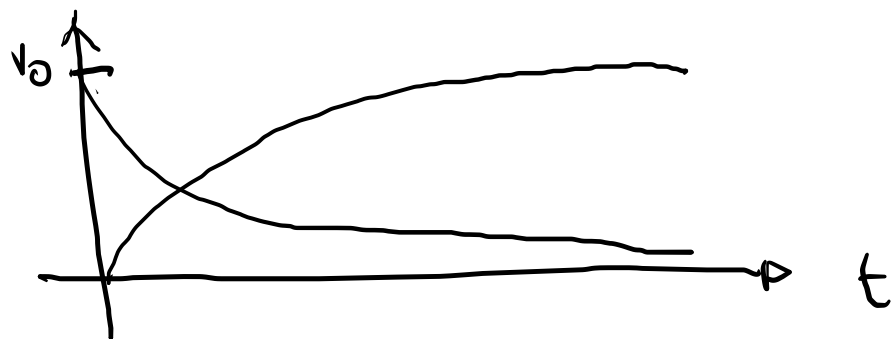
$$\Delta V = I \cdot \frac{1}{C} \cdot \Delta t$$

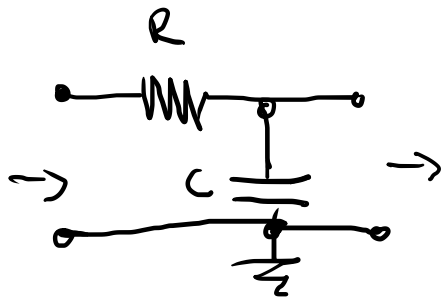
$$V_C = \frac{1}{C} \int_0^t I dt$$

$$i = I_0 e^{-\frac{t}{RC}} \rightarrow \underline{RC}$$

$$V_R = V_0 e^{-t/RC}$$

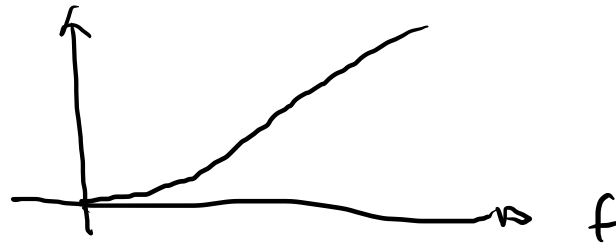
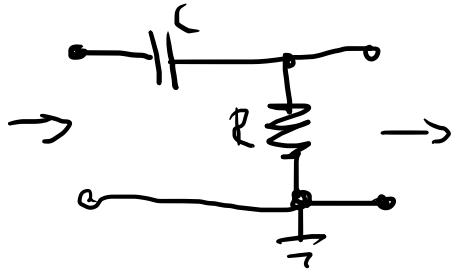
$$V_C = V_0 (1 - e^{-t/RC})$$





PASSA
BASSO

$$f_c = \frac{1}{2\pi RC}$$



PASSA
ALTO

