

April 8th.

Exercises 06

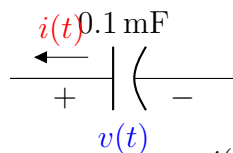
Capacitors and Inductors

Exercise 1 - Capacitors and inductors

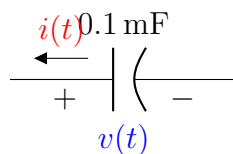
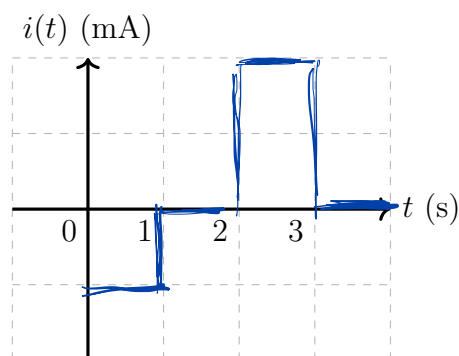
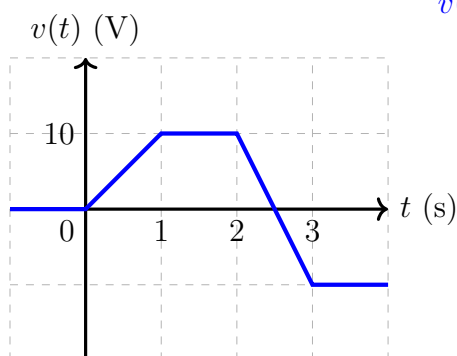
Plot the timing diagrams.

You will assume that the initial voltage or current for $t < 0$ is always zero.

$$i(t) = C \frac{dv(t)}{dt}$$

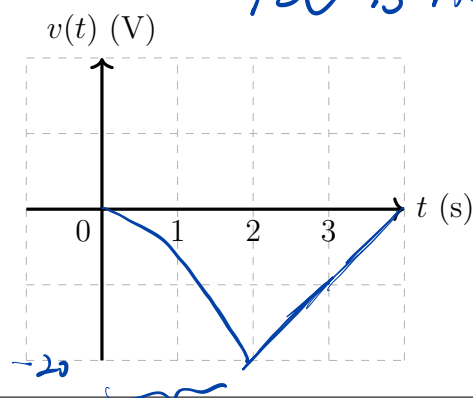
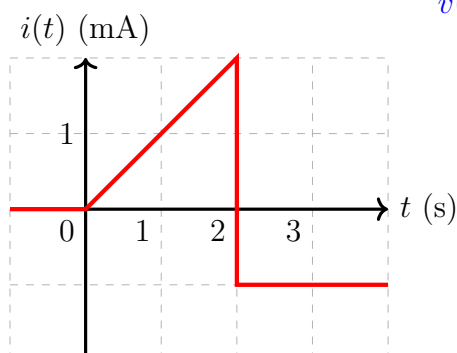


PSC is not satisfied



$$v(t) = v(t_0) + \frac{1}{C} \int_{t_0}^t i(t) dt$$

PSC is not satisfied



↓ current is not constant
iso the changing speed of v is not constant

