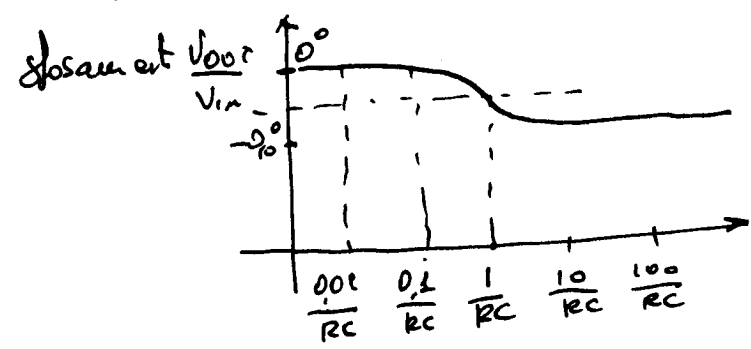
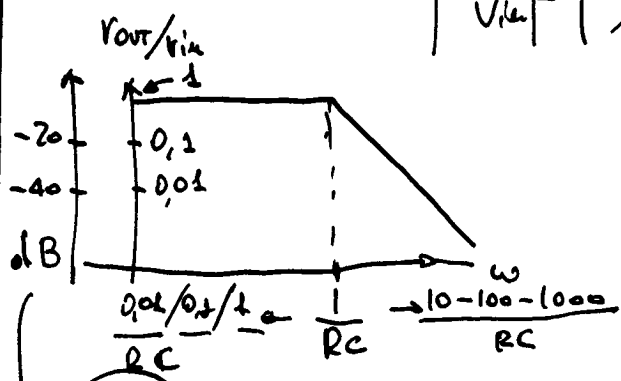
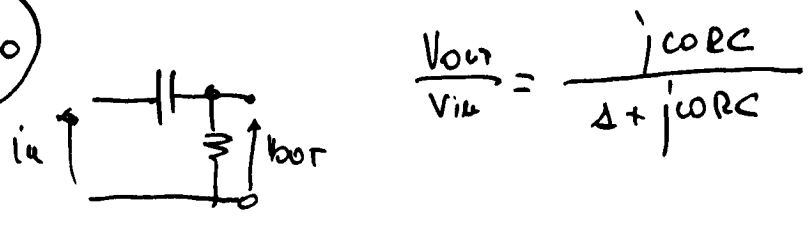


Condizione al cut-off: $\omega = \frac{1}{RC}$

$$\left| \frac{V_{out}}{V_{in}} \right| = \left| \frac{1}{1+j} \right| = \frac{1}{\sqrt{2}} = 0,707 \quad \text{sfasamento } -45^\circ$$



$20\text{db}/10$



$$\begin{aligned} \omega < \frac{1}{RC} & \quad \left| \frac{V_{out}}{V_{in}} \right| \rightarrow \left| \frac{j\omega RC}{1} \right| = \omega RC & \quad \text{sfasamento} = 90^\circ \\ \omega > \frac{1}{RC} & \quad \left| \frac{V_{out}}{V_{in}} \right| \rightarrow \left| \frac{j\omega RC}{j\omega RC} \right| = 1 & \quad \text{sfasamento} = 0^\circ \\ \omega = \frac{1}{RC} & \quad \left| \frac{V_{out}}{V_{in}} \right| \rightarrow \left| \frac{1}{1+j} \right| = \frac{1}{\sqrt{2}} & \quad \text{sfasamento} = 45^\circ \end{aligned}$$

