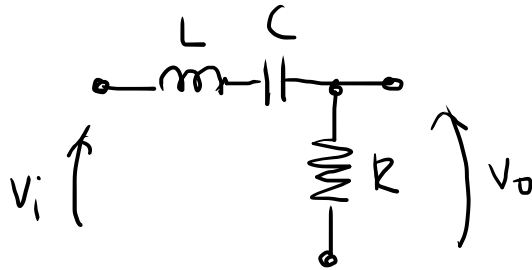
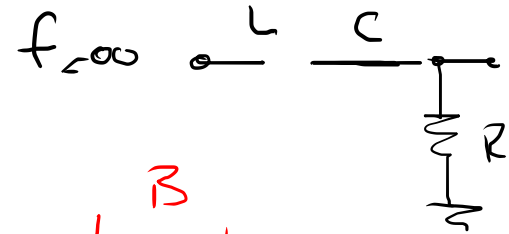
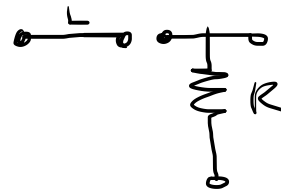


# 183 - Parallel Resonance and notch



$f = 0$



$$X_L = j\omega L$$

$$X_C = -j \frac{1}{\omega C}$$

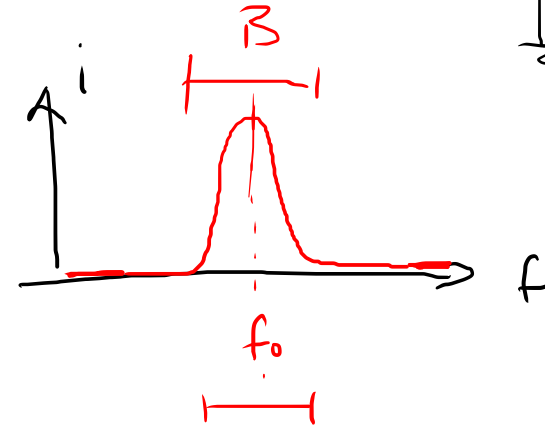
$$\omega = 2\pi f$$

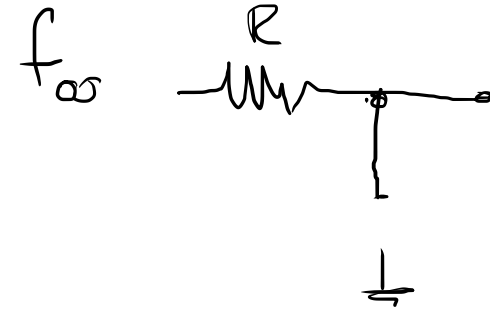
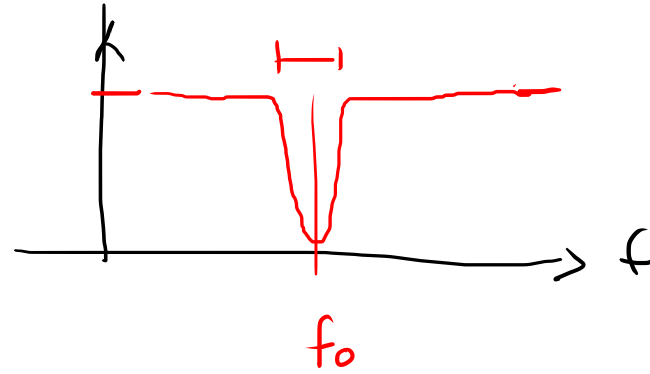
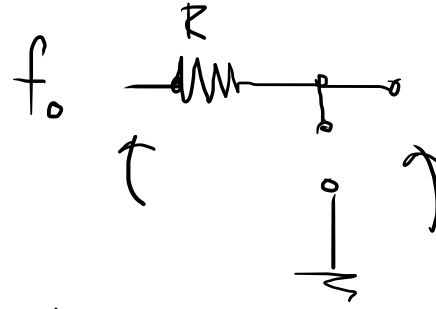
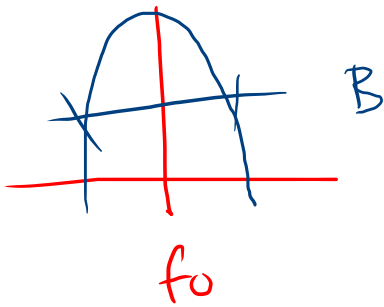
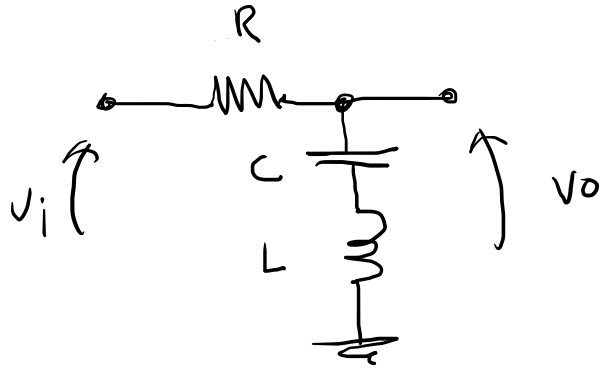
$$i = \frac{v_i}{Z}$$

$$Z = R + j\omega L - j \frac{1}{\omega C} =$$

$$= R + j \left( \omega L - j \frac{1}{\omega C} \right) \approx$$

$$f_0 = \frac{1}{2\pi \sqrt{LC}}$$





notch