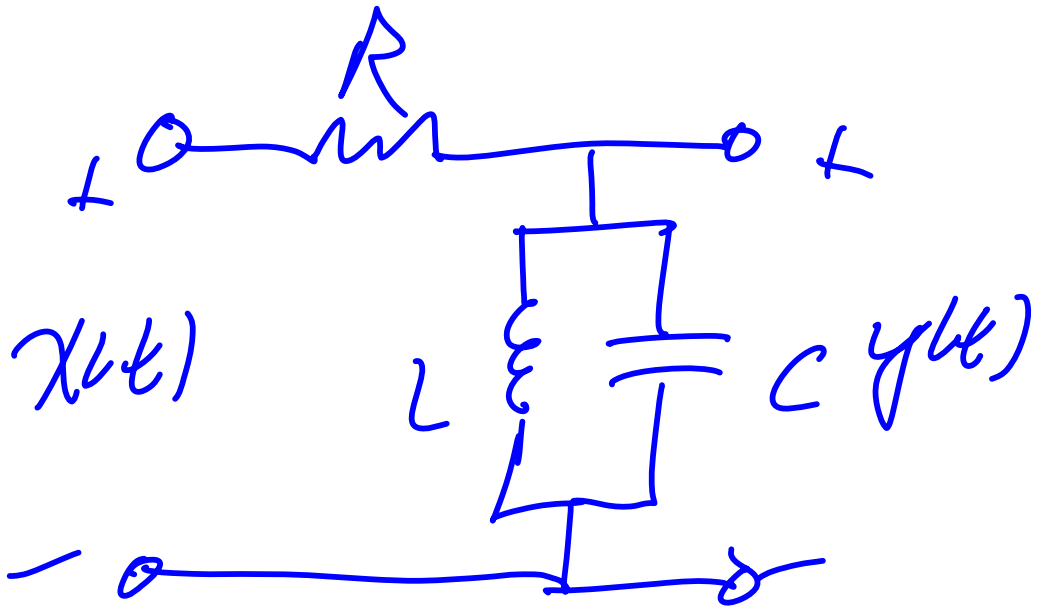
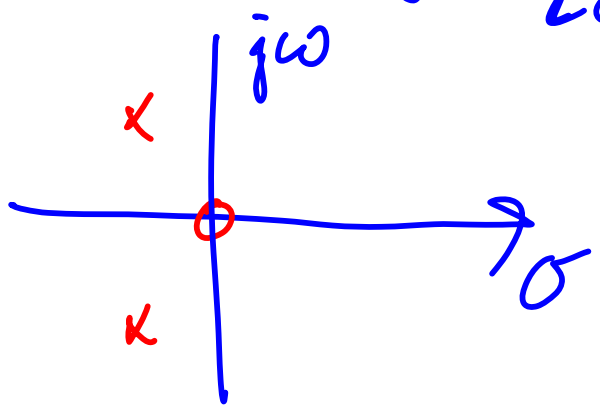
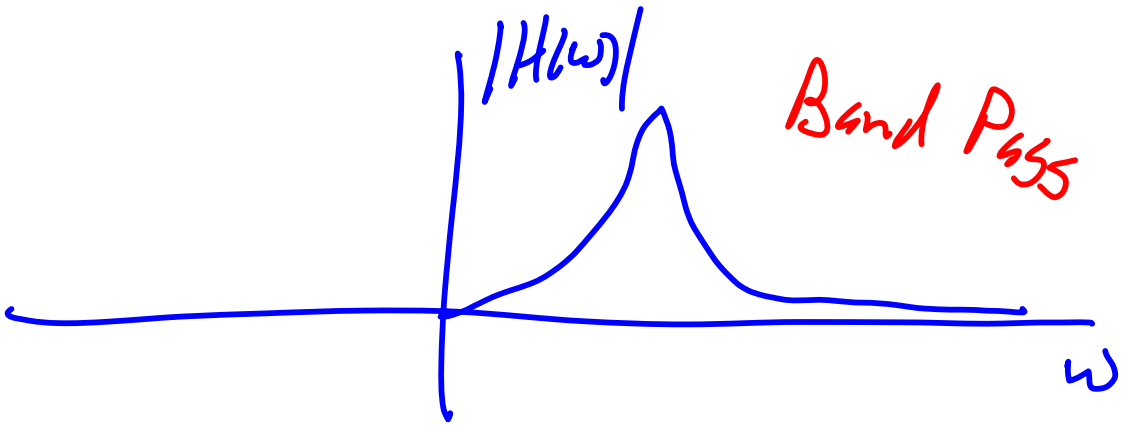


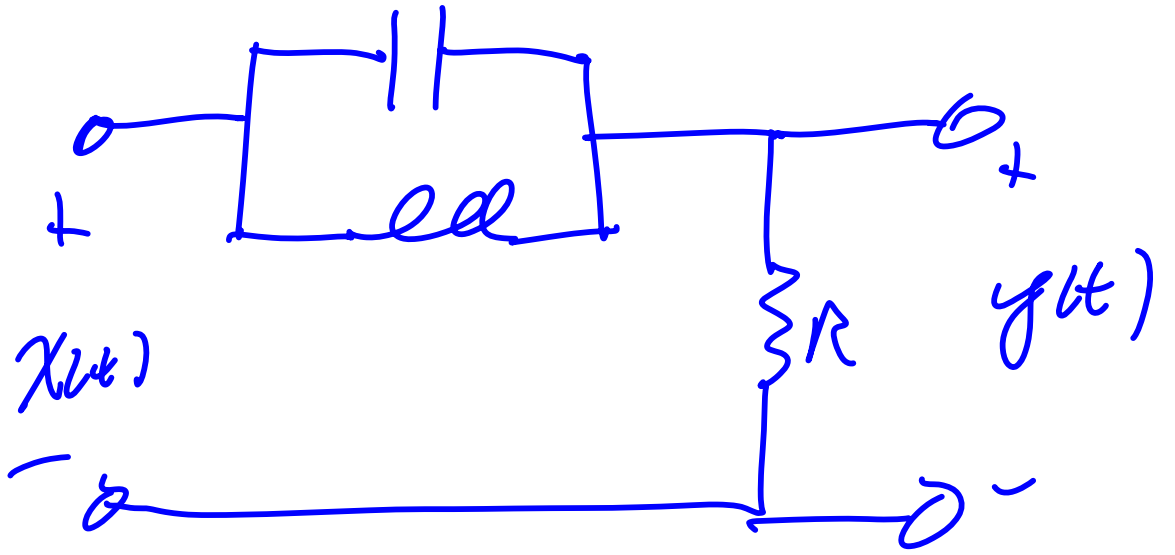
$$Z_{11} = \frac{Ls \cdot \frac{1}{Cs}}{Ls + \frac{1}{Cs}}$$

$$= \frac{\frac{1}{C}s}{s^2 + \frac{1}{LC}}$$

$$H(s) = \frac{\frac{\frac{1}{C}s}{s^2 + \frac{1}{LC}}}{R + \frac{\frac{1}{C}s}{s^2 + \frac{1}{LC}}} = \frac{\frac{1}{RC}s}{s^2 + \frac{1}{RC}s + \frac{1}{LC}}$$







$$Z_{11} = \frac{\frac{1}{C}s}{s^2 + \frac{1}{LC}}$$

$$H(s) = \frac{R}{R + \frac{\frac{1}{C}s}{s^2 + \frac{1}{LC}}} = \frac{s^2 + \frac{1}{LC}}{s^2 + \frac{1}{RC}s + \frac{1}{LC}}$$