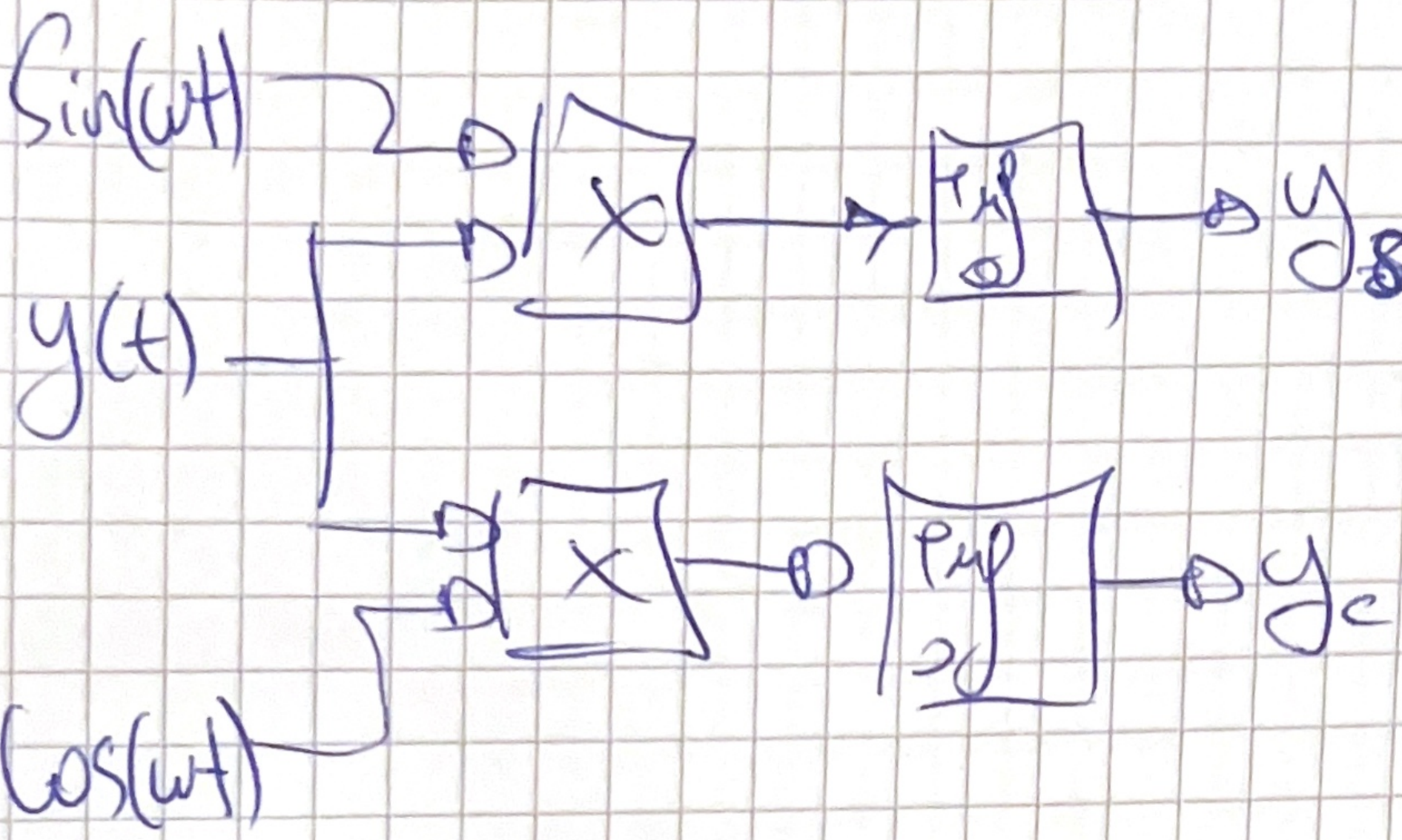
Bode estimation:



$$b = \frac{2}{T_m}\sqrt{y_s^2 + y_c^2} \quad \left| \quad \varphi = tg^{-1}\left(\frac{y_c}{y_s}\right)\right.$$

$$x(t) = a\sin(\omega t) \quad y(t) = b\sin(\omega t + \varphi)$$

$$y_s \approx \frac{b}{2} T_m \cos(\varphi) \quad \left| \quad y_c \approx \frac{b}{2} T_m \sin(\varphi)\right.$$

T_m = measurement period

$n \cdot \frac{0.5}{f}$ → will cancel harmonies