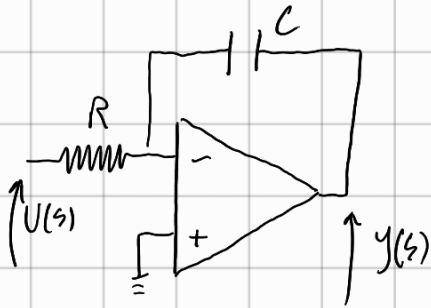


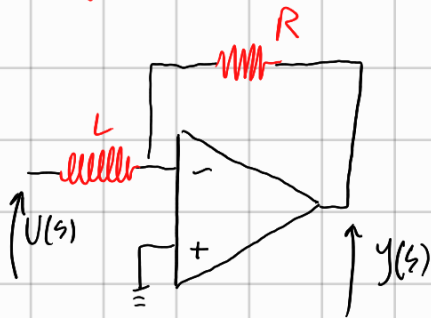
① INTEGRATORE



$$W(s) = -\frac{K}{s}$$

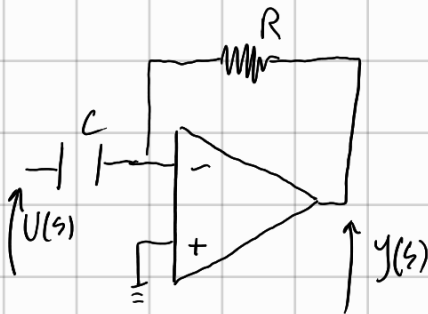
$$K = \frac{1}{RC} = \frac{1}{T}$$

Alternativa



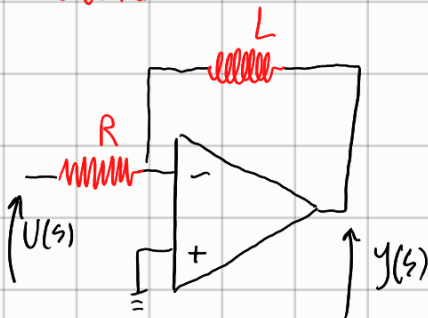
$$W(s) = -\frac{K}{s} \quad K = \frac{R}{L} = \frac{1}{T}$$

② DERIVATORE



$$W(s) = -Ks \quad K = RC = T$$

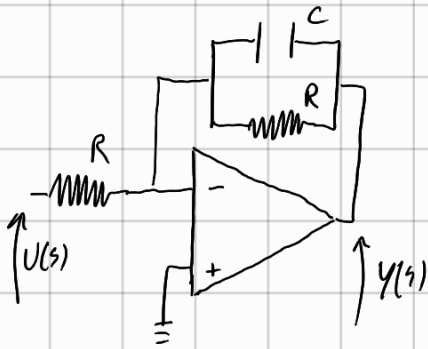
Alternativa



$$W(s) = -Ks \quad K = \frac{L}{R} = T$$

NOTA: $W(s)_{\text{REALE}} = -\frac{Ks}{1+sT}$, con $\frac{1}{T}$ in alta frequenza

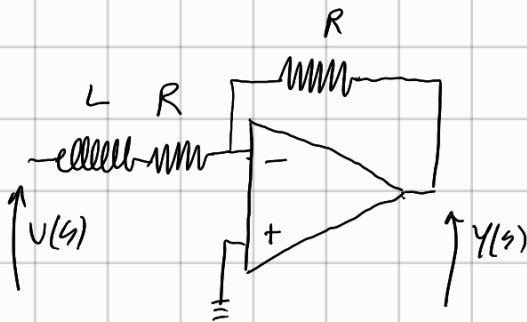
③ LPF



$$W(s) = - \frac{1}{1 + s\tau}$$

$$\tau = RC$$

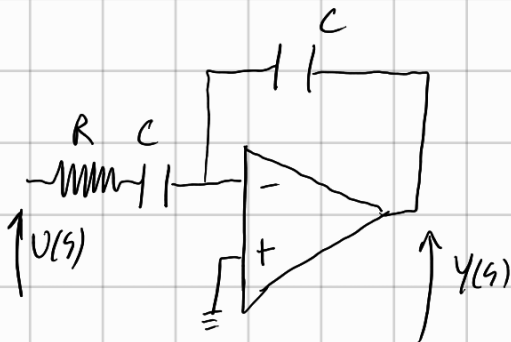
Alternativa



$$W(s) = - \frac{1}{1 + s\tau}$$

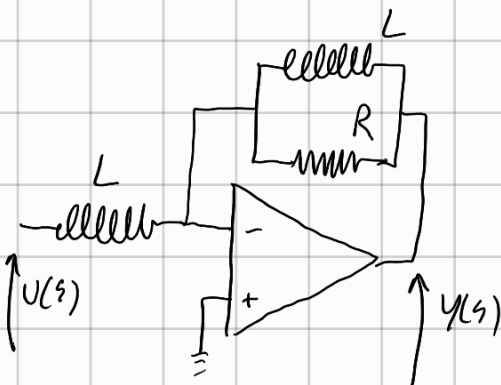
$$\tau = \frac{L}{R}$$

Alternativa



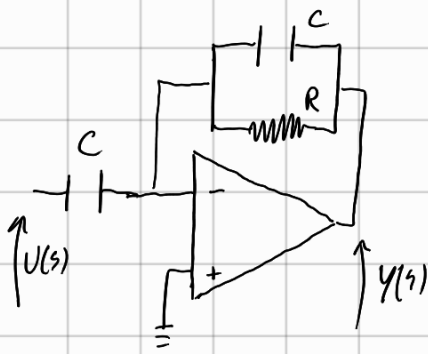
$$\tau = RC$$

Alternativa



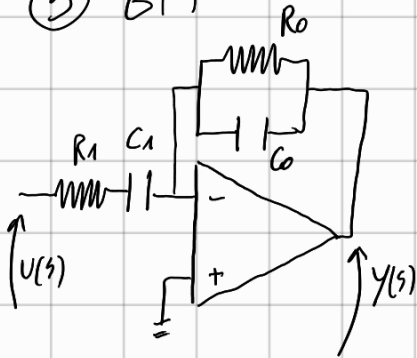
$$\tau = \frac{L}{R}$$

④ HPF



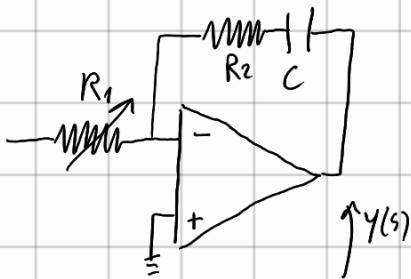
$$W(s) = - \frac{s\tau}{1+s\tau}, \quad \tau = RC$$

⑤ BPF



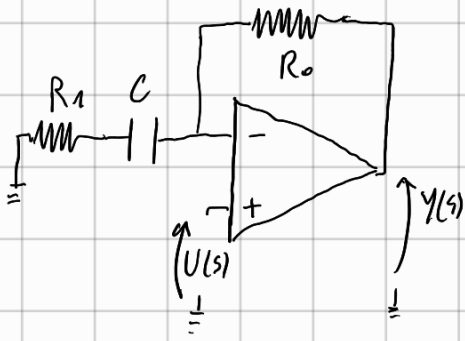
$$W(s) = \frac{-sR_0C_1}{(1+sR_0C_0)(1+sR_1C_1)}$$

⑥ PI con gain variable



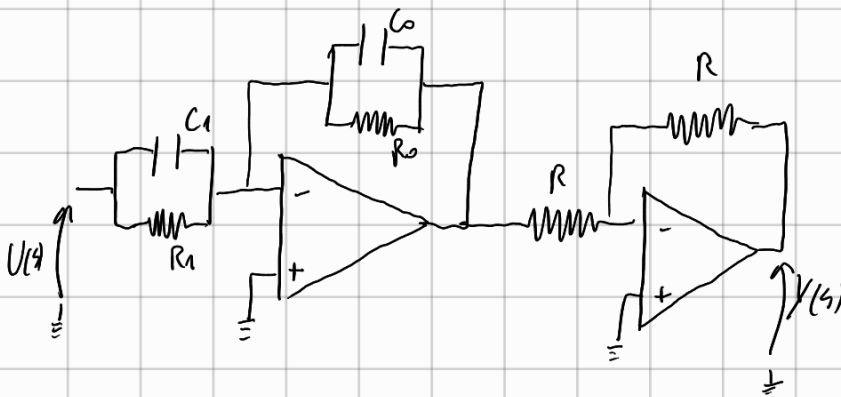
$$W(s) = - \frac{R_2}{R_1} \left(1 + \frac{1}{sCR_2} \right) \quad K_P = - \frac{R_2}{R_1} \quad T_I = R_2C$$

⑦ RETE ANTICIPATRICE MONCA



$$W(s) = \frac{1 + (R_o + R_1)Cs}{1 + R_1Cs}$$

⑧ RETE ANT/RIT



$$W(s) = - \frac{R_o}{R_1} \frac{(1 + sR_1C_1)}{(1 + sR_oC_o)}$$