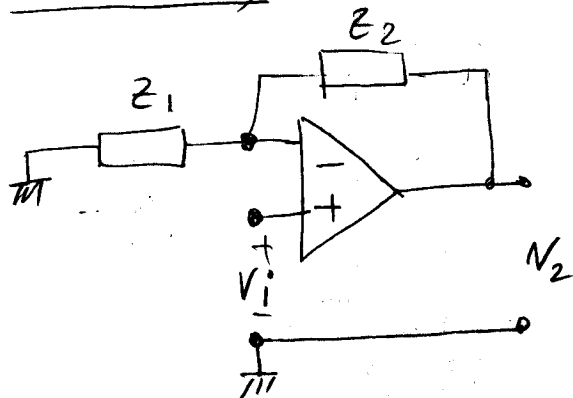


$R=1, C=1$

- Calcolo $F(s) = V_2/V_1$
- Andamento qualitativo rispetto in frequenza

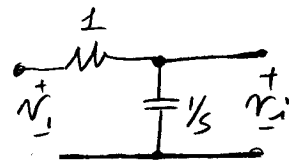
1) Calcolo $F(s)$: Amplificatore invertente + partitore tensivo



$$V_2 = \left(1 + \frac{Z_2}{Z_1}\right) V_i = \begin{cases} Z_1 = \frac{1}{sC} / R = \frac{1}{s+1} \\ Z_2 = 1 \end{cases}$$

$$= (s+2) V_i$$

• partitore tensivo



$$V_i = \frac{V_2}{R + \frac{1}{sC}} \cdot \frac{1}{sC} = \frac{V_2}{s+1}$$

$$F(s) = \frac{V_2(s)}{V_1(s)} = \frac{s+2}{s+1}$$

2) Risposta in frequenza

Riscriviamo la $F(s)$ evidenziando poli e zeri

$$F(s) = 2 \frac{(1 + \frac{s}{2})}{(1 + s)}$$

1 polo in $\omega = 1$

1 zero per $\omega = 2$

