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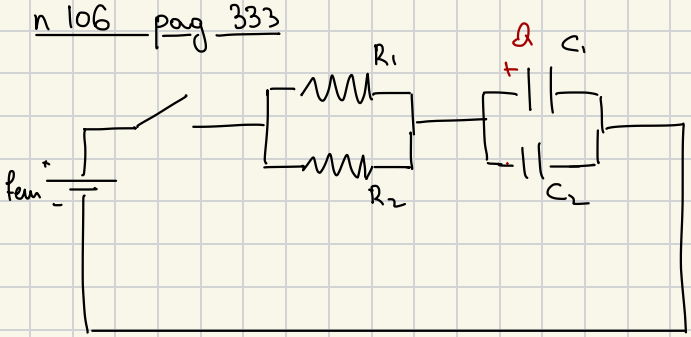
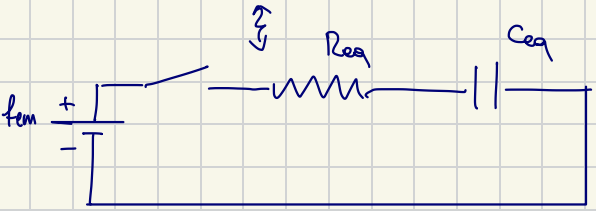


$R_2 = nR_1$

$C_2 = mC_1$

n, m in modo che il tempo caratteristico sia $2R_1C_1$

$\rightsquigarrow$ RC tempo car.



$$\frac{1}{R_{eq}} = \frac{1}{R_1} + \frac{1}{R_2} = \frac{1}{R_1} + \frac{1}{nR_1} = \frac{n+1}{nR_1}$$

$$\rightsquigarrow \boxed{R_{eq} = \frac{nR_1}{n+1}}$$

$$C_{eq} = C_1 + C_2 = C_1 + mC_1 = (1+m)C_1$$

Impongo tempo caratteristico alla formula di teoria:

$$R_{eq}C_{eq} = 2R_1C_1 \qquad (1+m)\frac{n}{n+1}R_1C_1 = 2R_1C_1$$

$$(1+m) = 2\frac{n+1}{n} \qquad m = 2\frac{n+1}{n} - 1 \Rightarrow m = 2 + \frac{2}{n} - 1$$

$$m = \frac{2}{n} + 1$$

Dato che m intero $\Rightarrow$ n può essere solo 1 o 2

$\Rightarrow$ $n = 1$, $m = 3$ oppure $n = 2$, $m = 2$