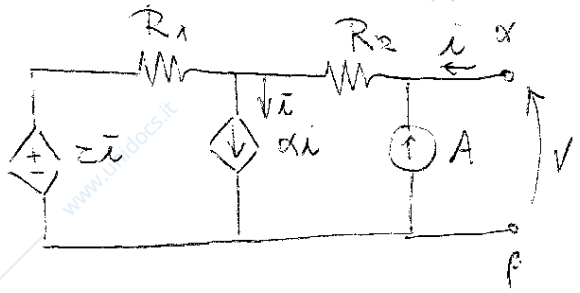


Es. 2

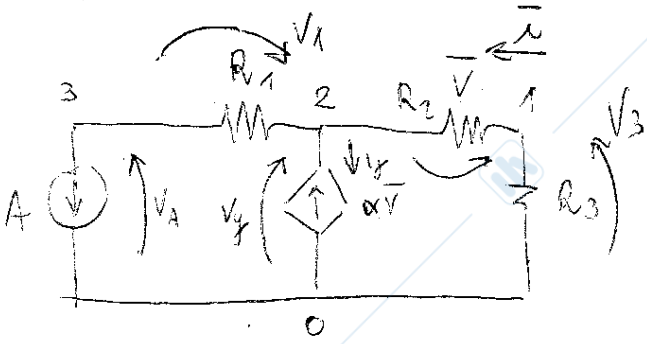
$$V_x - R_2(i+A) - R_1(i+A-\alpha i) - 2\alpha i = 0$$

$$i\left(R_2 + R_1(1-\alpha) + 2\alpha\right) = V - (R_1+R_2)A$$

$$i = \frac{V}{R_2+R_1(1-\alpha)+2\alpha} - \frac{R_1+R_2}{R_2+R_1(1-\alpha)+2\alpha}\cdot A$$

$$R_2 + R_1(1-\alpha) + 2\alpha \neq 0$$

$$[\alpha] = \Omega^{-1}$$



Es. 2

$$\bar{V} = u_1 - u_2 \qquad \bar{i} = \frac{u_1-u_2}{R_2}$$

$$V_3 = u_1 \qquad i_3 = u_1/R_3$$

$$V_1 = u_2 - u_3 \qquad i_1 = \frac{u_2-u_3}{R_1}$$

$$V_A = u_3 \qquad i_A = A$$

$$V_g = u_2 \qquad i_g = -\alpha(u_1-u_2)$$

$$*3 \quad \frac{u_2-u_3}{R_1} = A \qquad u_2 = R_1 A + u_3$$

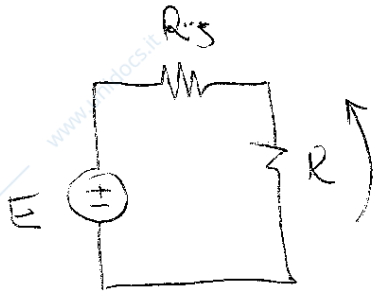
$$(u_1-u_2)\left(\frac{1}{R_2}+\alpha\right) = A \qquad u_1-u_2 = \frac{R_2 A}{1+\alpha R_2}$$

$$*2 \quad \frac{u_2-u_3}{R_1} + (u_1-u_2)(-\alpha) = \frac{u_1-u_2}{R_2}$$

$$u_1 = -\frac{R_3 R_2 A}{1+\alpha R_2}\cdot\frac{1}{R_2}$$

$$*1 \quad \frac{u_1-u_2}{R_2} + \frac{u_1}{R_3} = 0 \qquad R_3(u_1-u_2) + R_2 u_1 = 0$$

$$u_1 = \frac{R_3 u_2}{R_2+R_3}$$



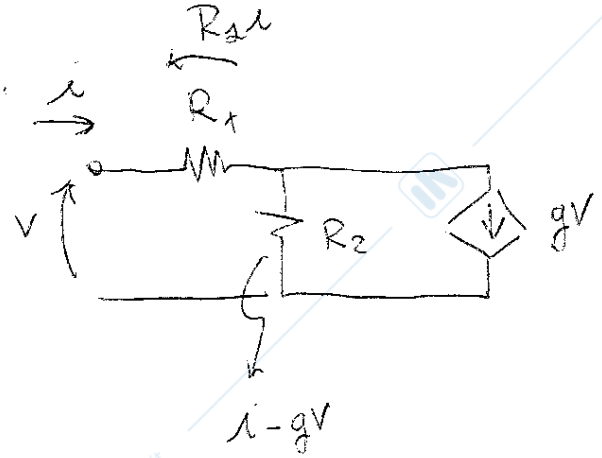
$$i = \frac{E}{R_S + R}$$

$$P_2^R = \frac{RE^2}{(R_S+R)^2} \qquad \frac{d}{dR} P_2^R = \frac{E^2}{(R_S+R)^2} +$$

$$-2\frac{RE^2}{(R_S+R)^3} =$$

$$= \frac{E^2(R_S + R - 2R)}{(R_S+R)^3} \geq 0$$

se $R_S = R$



$1 + R_2 g \neq 0$

$$V - R_1 i - R_2(i - gV) = 0$$

$$V + R_2 g V = (R_1 + R_2) i$$

$$V = \frac{R_1 + R_2}{1 + R_2 g} i$$

$$\frac{R}{\frac{R_1+R_2}{1+R_1 g}} = R_S$$

$$R_1 + R_2 = R_S(1 + R_1 g)$$

$$\left(\frac{R_1 + R_2}{R_S} - 1\right)\frac{1}{R_2} = g$$