

ES2)

1) RISOLUZIONE CIRCUITO CON AZERIONE

$$V_U = \frac{R_G E}{R_1} \left(\frac{R_T}{R_3} - 1 \right)$$

$$R_T = R_0 (1 + GFE)$$

$$V_U = \frac{R_G E}{R_0} \left(\frac{R_0 (1 + GFE)}{R_3} - 1 \right) = \frac{R_G E GFE}{R_3}$$

$$\frac{R_G E GF}{R_3} = 100 \cdot 3 \cdot 2 = 600 \checkmark$$

$$V_U = 600 E \quad E = \frac{V_U}{600} = \frac{2V}{600V} = 0.0033$$

2)

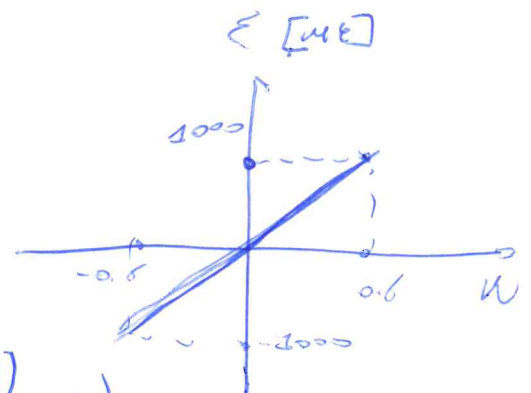
$$\boxed{E = \frac{V_U}{S}}$$

$$S = 600 \quad 0 = \phi V$$

$$1000 \mu E = 1000 \cdot 10^{-6} \quad 1000 \cdot 10^{-6} \cdot S = 0.6 \checkmark$$

$$V_U (1000 \mu E) = 0.6 \checkmark$$

$$V_U (-1000 \mu E) = -0.6 \checkmark$$



$$3) V_U = \frac{R_G E}{R_1} \left(\frac{R_0 (1 + GFE) (1 + \alpha(T - T_0))}{R_3} - 1 \right)$$

$$T_0 = 25^\circ C$$

$$V_U = \frac{R_G E}{R_1} \left(GFE + \alpha(T - T_0) \right)$$

~~0.00147~~

$$\varepsilon_1 = \frac{V_U}{S} = \frac{1V}{600V} = \cancel{0.00167} \quad \left(\begin{smallmatrix} \text{DBF.} \\ \text{Assunto} \end{smallmatrix} \right)$$

$$\varepsilon_{\text{RNDAB}} = \frac{\Delta V_U}{S} = \frac{\frac{R_G}{R_0} \varepsilon \text{TCR} (T-T_0)}{\frac{R_0}{R_0} \varepsilon \text{GF}} = \frac{\text{TCR}}{\text{GF}} (T-T_0)$$

$$\varepsilon_{\text{RNDAB}} = \frac{3 \cdot 10^{-5}}{2} (-1) = -1.5 \cdot 10^{-5}$$

DUANX GAGE $R_0 (1 + \alpha (T-T_0)) = R_0$

DA MONTARE AC PUNTO DI R3

IN FOTRI $V_U = \frac{R_G}{R_0} \varepsilon \left(\frac{\cancel{R_0 (1 + \beta F \varepsilon)} (1 + \alpha (T-T_0))}{\cancel{R_0 (1 + \alpha (T-T_0))}} - 1 \right)$

\Rightarrow USCITA CON B AC PUNTO 1!

4) VBUI TECNIA