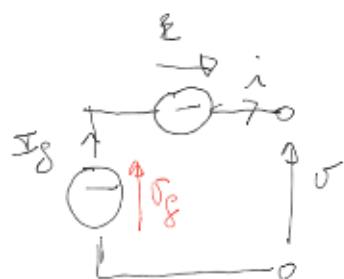


Lezione 12

Alcuni modelli equivalenti



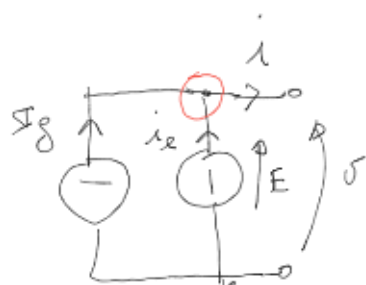
$$v = f(i) \quad \text{oppure} \quad i = g(v)$$

$$i = I_g$$

$$+v - E - I_g = 0 \Leftrightarrow v = E + I_g = ?$$



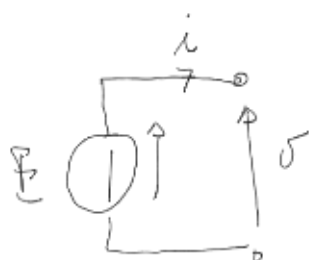
↔



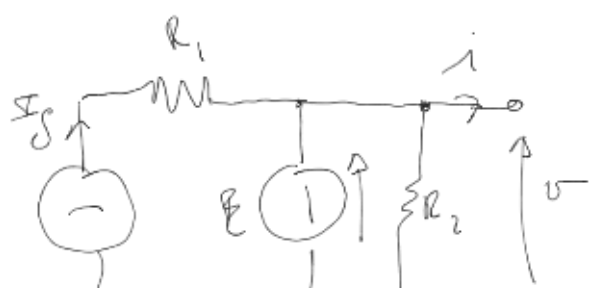
$$v = E$$

$$-i + I_g + I_e = 0$$

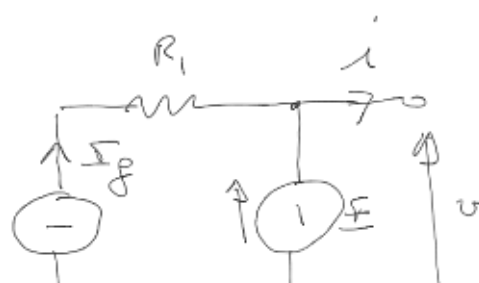
$$i = I_g + I_e = ?$$

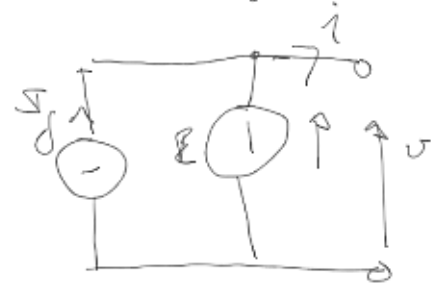
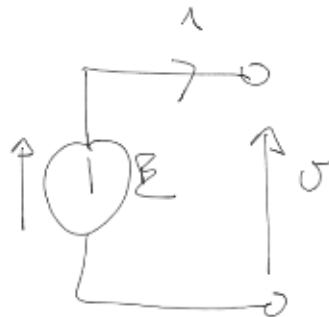
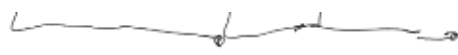


ESEMPIO, LEGGERMENTE PIÙ COMPLESSO



EQ ↔

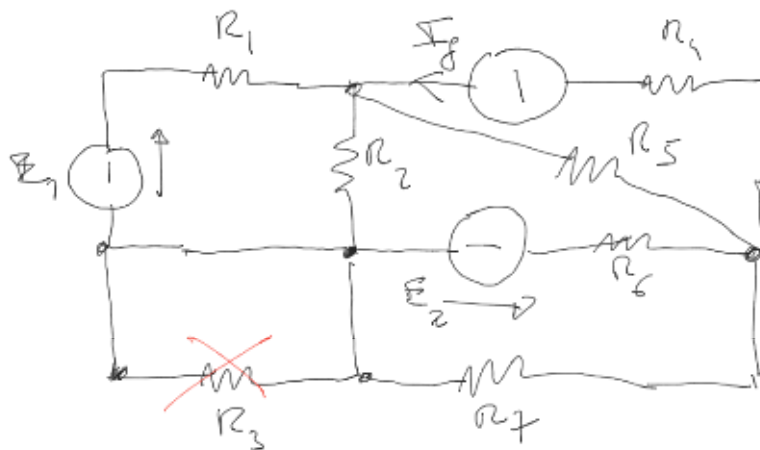




Si definisce ciruito resistivo un circuito che
contiene solo GEN IDEALI E RESISTORI

Si definisce ciruito PURAMENTE resistivo un
circuito che contiene solo RESISTORI

ESEMPIO di CIRCUITO RESISTIVO



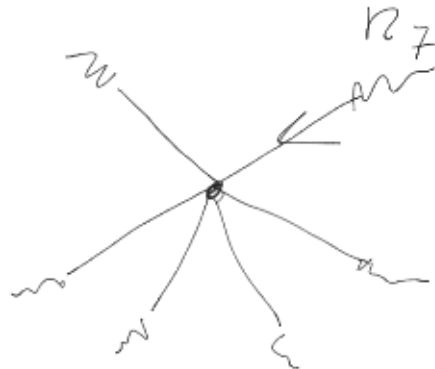
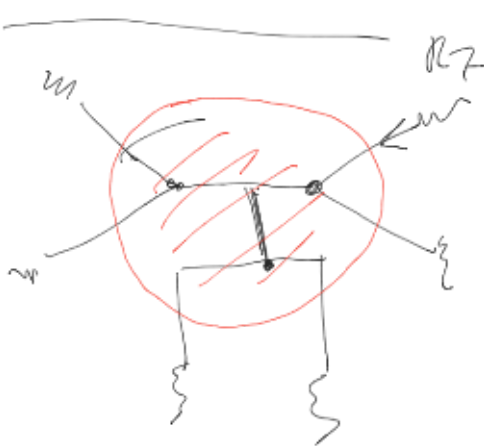
$$P_{R_1} = R_1 \cdot \frac{U_1^2}{R_1^2}$$

$$P_{R_3} = 0 \text{ W}$$

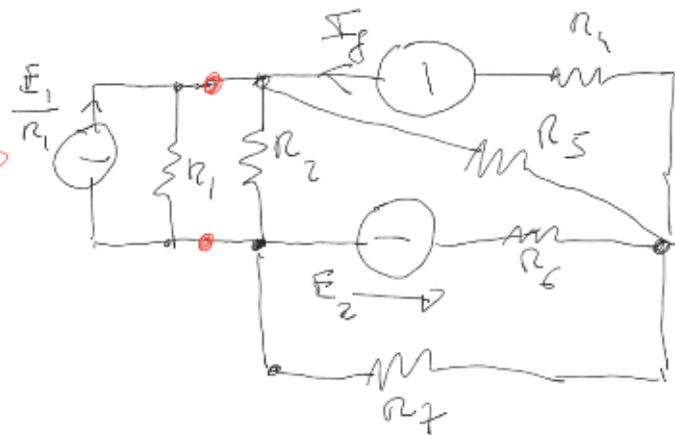
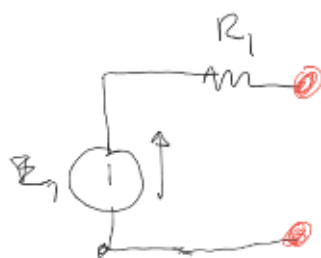
CONOSCO, DA PROGETTO, TUTTI I VALORI DELLE RESISTENZE
E DEI GENERATORI

$$P = V \cdot I = \frac{V^2}{R} = R \cdot I^2$$

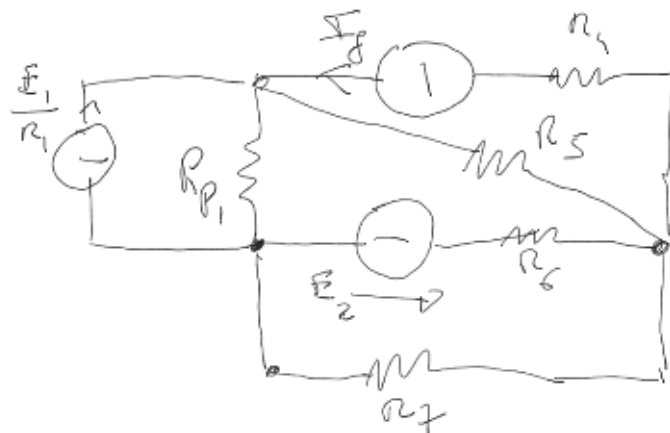
Osservazione

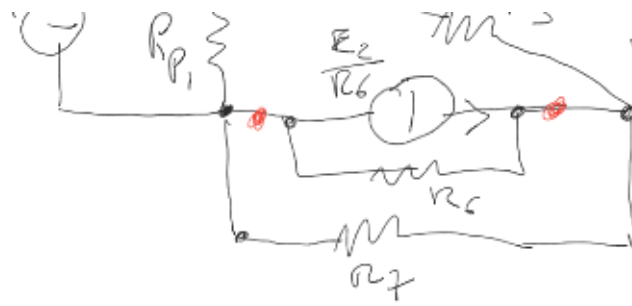


$$R_3 = ?$$

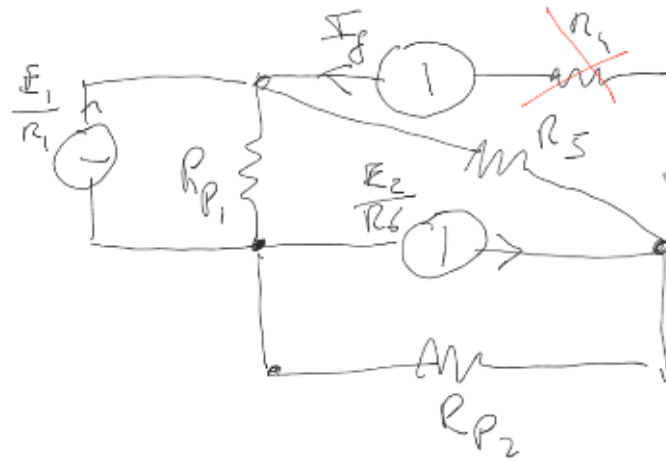


$$R_1 // R_2 = R_p$$

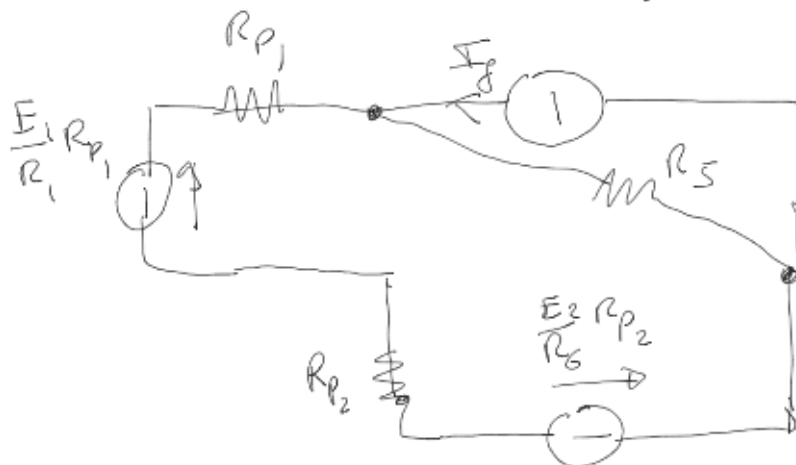
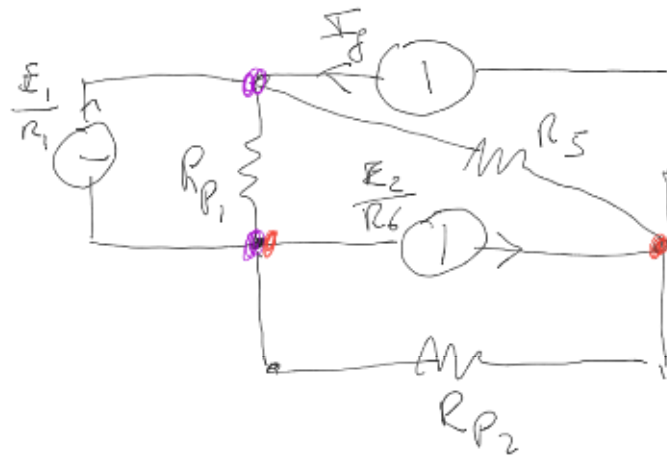


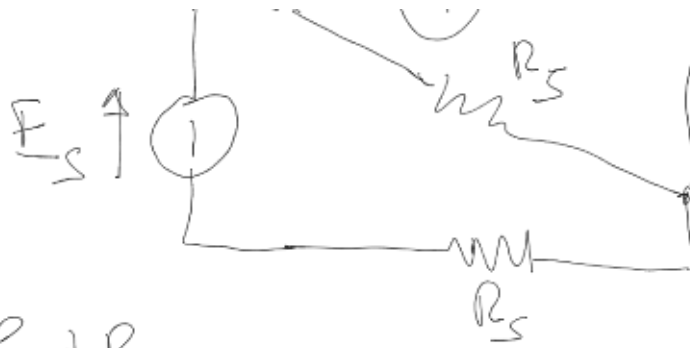


$$R_6 // R_7 = R_{p2}$$



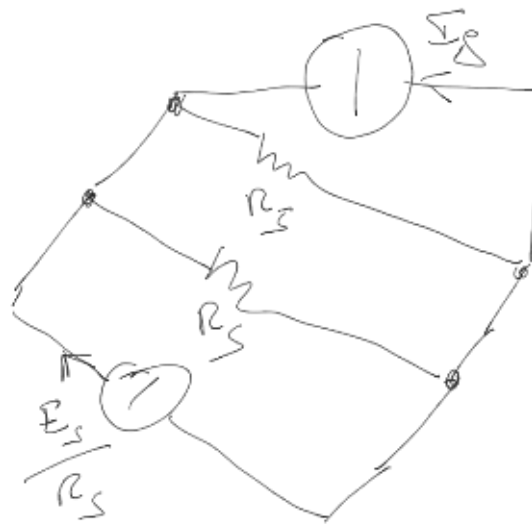
RESISTENZA IN
SERIE AD UN
GEN DI CORRENTE



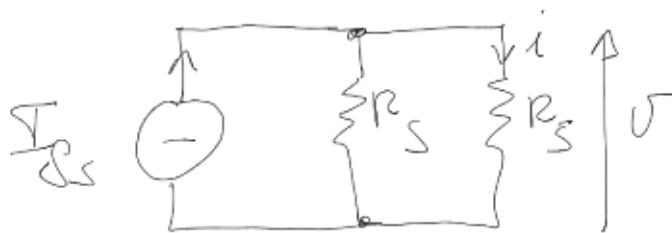


$$R_s = R_{P1} + R_{P2}$$

$$E_s = \frac{E_1}{R_1} R_{P1} - \frac{E_2}{R_2} R_{P2}$$

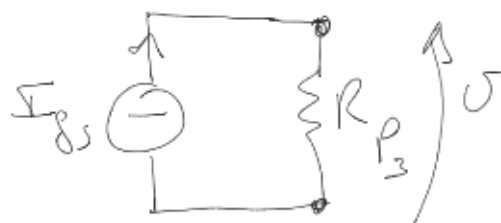


$$V_{gs} = V_g + \frac{E_s}{R_s}$$



$$P_{R_s} = \frac{v^2}{R_s} = R_s i^2$$

$$R_{P3} = R_s // R_s$$



$$V = R_P \Sigma \delta_S$$

So che V del parametro Σ è uguale alla V della R_S

$$P_{R_S} = \frac{V^2}{R_S} = \frac{(R_P \Sigma \delta_S)^2}{R_S}$$

$$P = R_S i^2$$