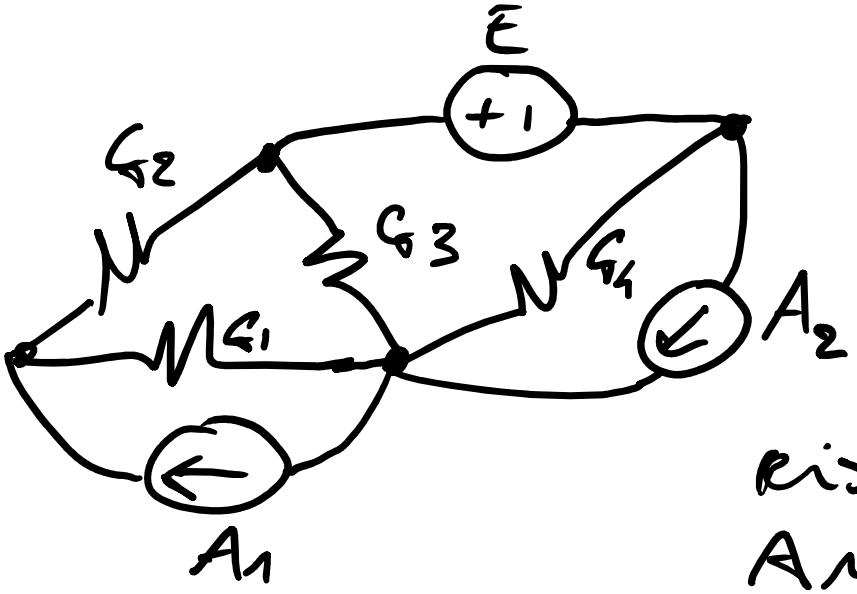
ES. 3

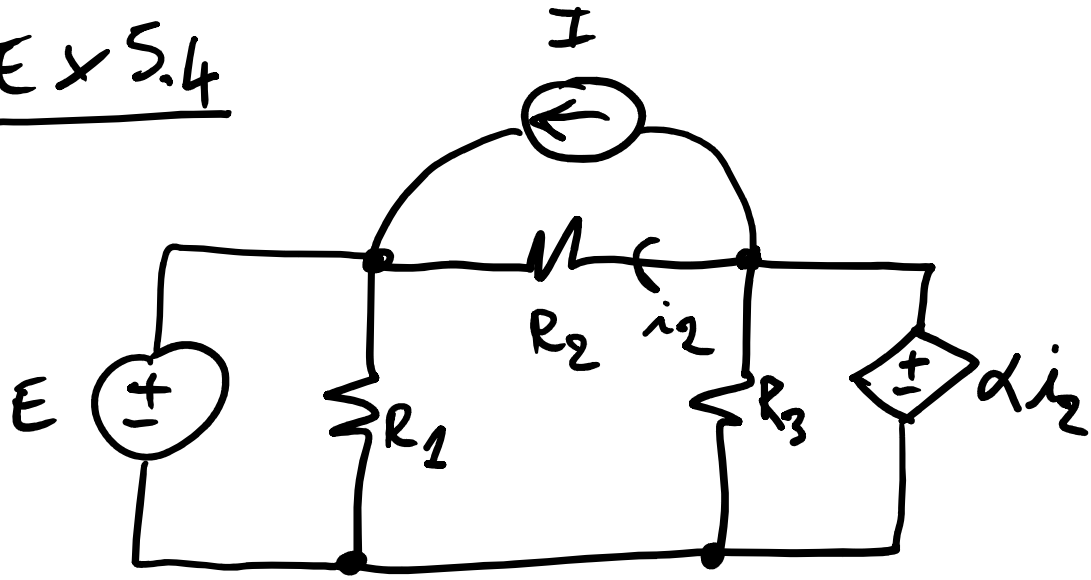


Hp

- A_1, A_2
- E
- G_{1-4}

Risolvere con Analisi Nodale Modificata (MNA)

Ex 5.4

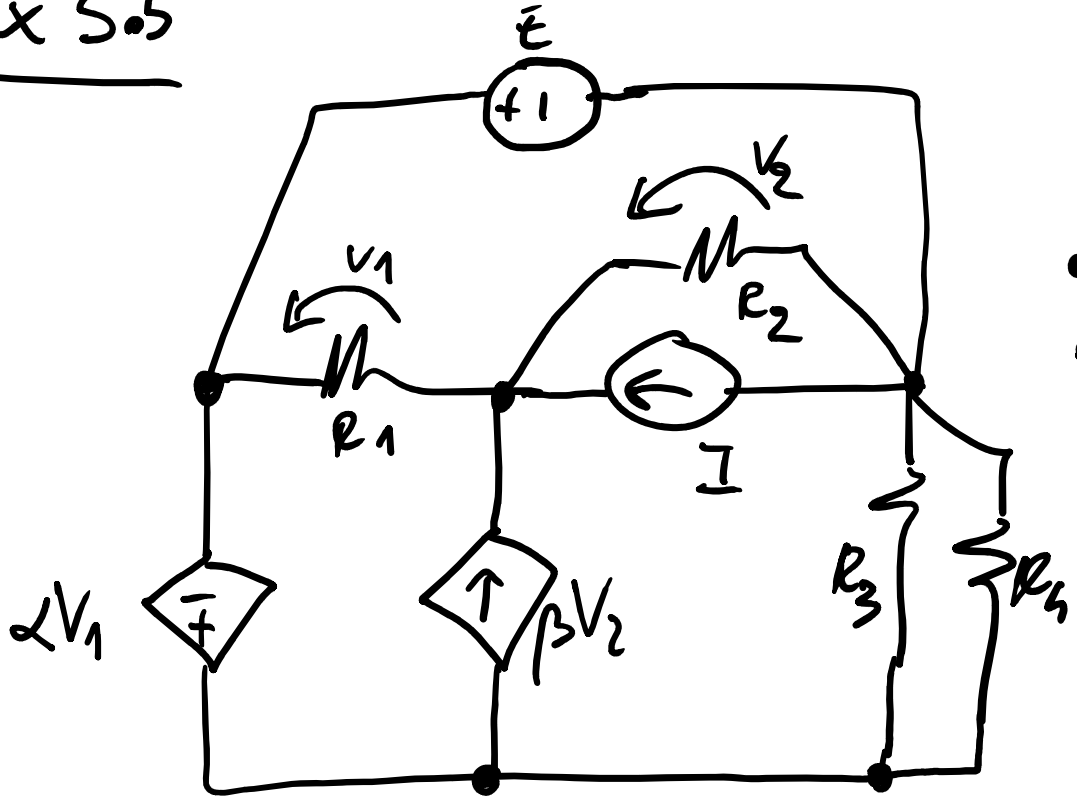


Hp

- R_{1-3}
- α [S]
- E
- I

Verificare il Bilancio delle Potenze

Ex 5.5



Hp

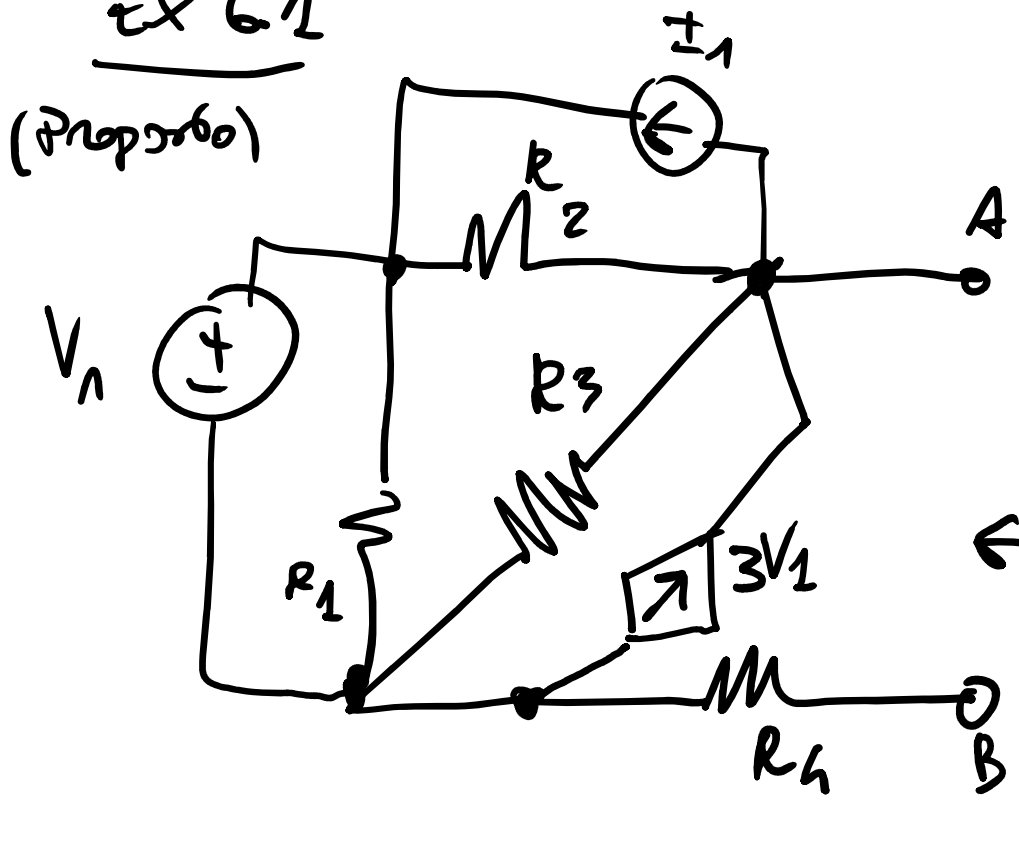
- $R_{1-4} = 1\,\Omega$
- $\alpha = 10$
- $\beta = 5\ \Omega^{-1}$
- $I = 5A$
- $E = 12V$

Determinare tutte le "v_n" e tutte le "i_n" del circuito utilizzando:

1) MNA
2) Supernodi

Ex G1

(proposto)



HP V_1, I_1 Noti

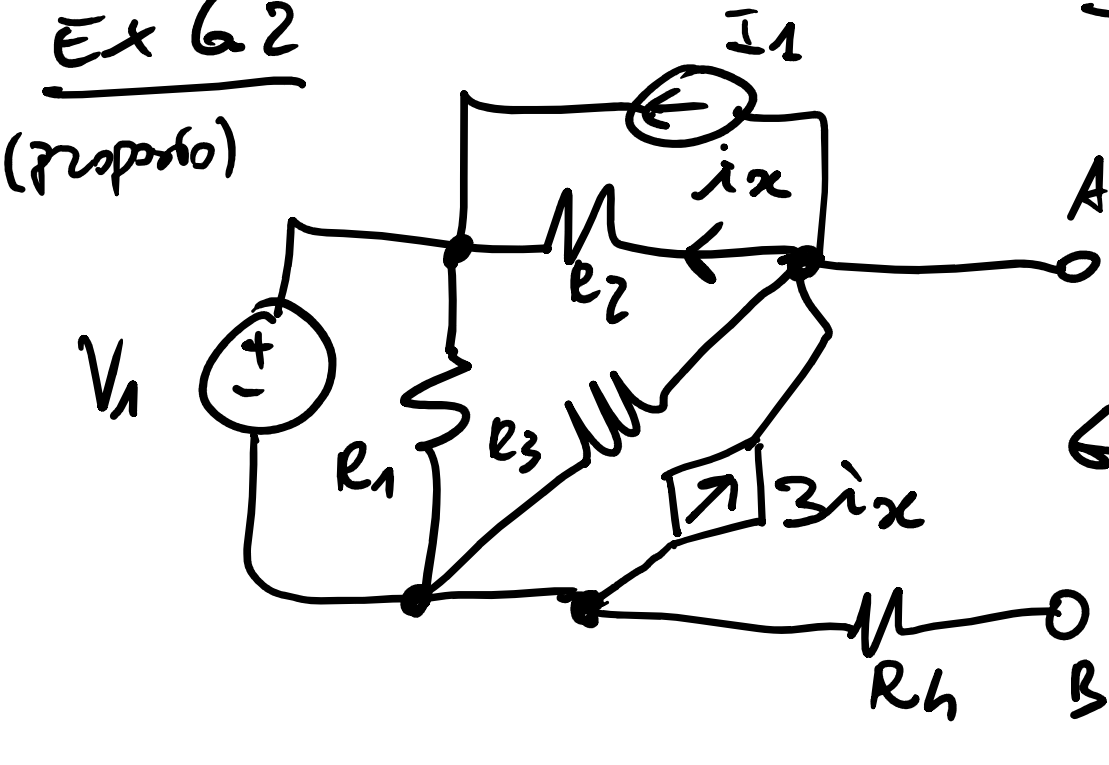
$R_{1-4} = 1\,\Omega$

Determinare R_{AB}

$[R_{AB} = \frac{3}{2}\,\Omega]$

Ex G2

(proposto)



HP •) V_1, •) I_1

•) $R_{1-4} = 1\,\Omega$

→ R_{AB} ?

$[R_{AB} = -\frac{1}{2}\,\Omega]$

Ex 6.3

(Proposto)

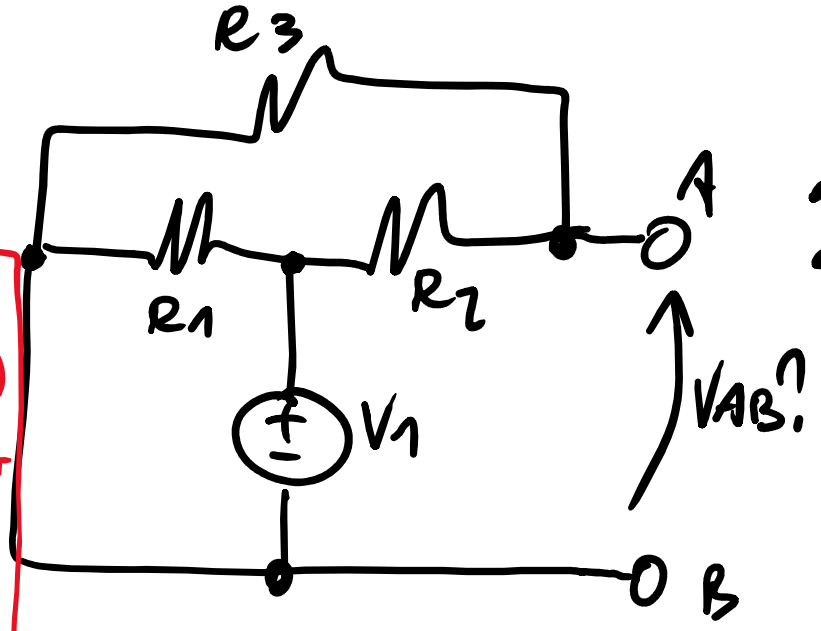
$V_{AB} = 3V$

$P_{V1} = 45W$ (GEN)

$P_{R1} = 22{,}5W$ (UT)

$P_{R2} = 18W$ (UT)

$P_{R3} = 4{,}5W$ (UT)



Hp

a) $V_1 < 15V$

a) $R_1 = 10\Omega$

a) $R_2 = 8\Omega$

a) $R_3 = 2\Omega$

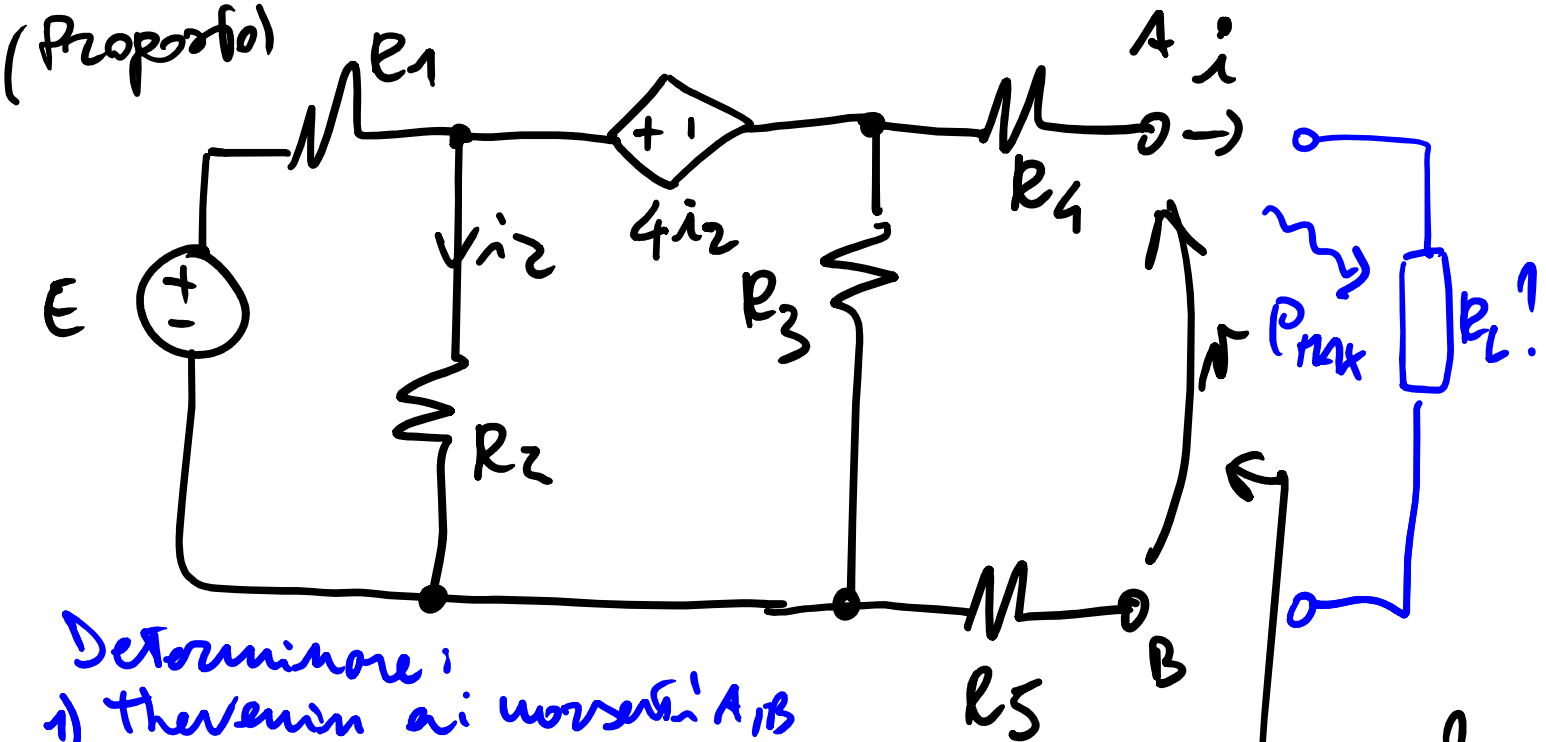
→ V_{AB}?

→ Tellegen?

Ex 6.4

Hp a) $E < 3V$; $R_{1-4} = 1\Omega$

(Proposto)



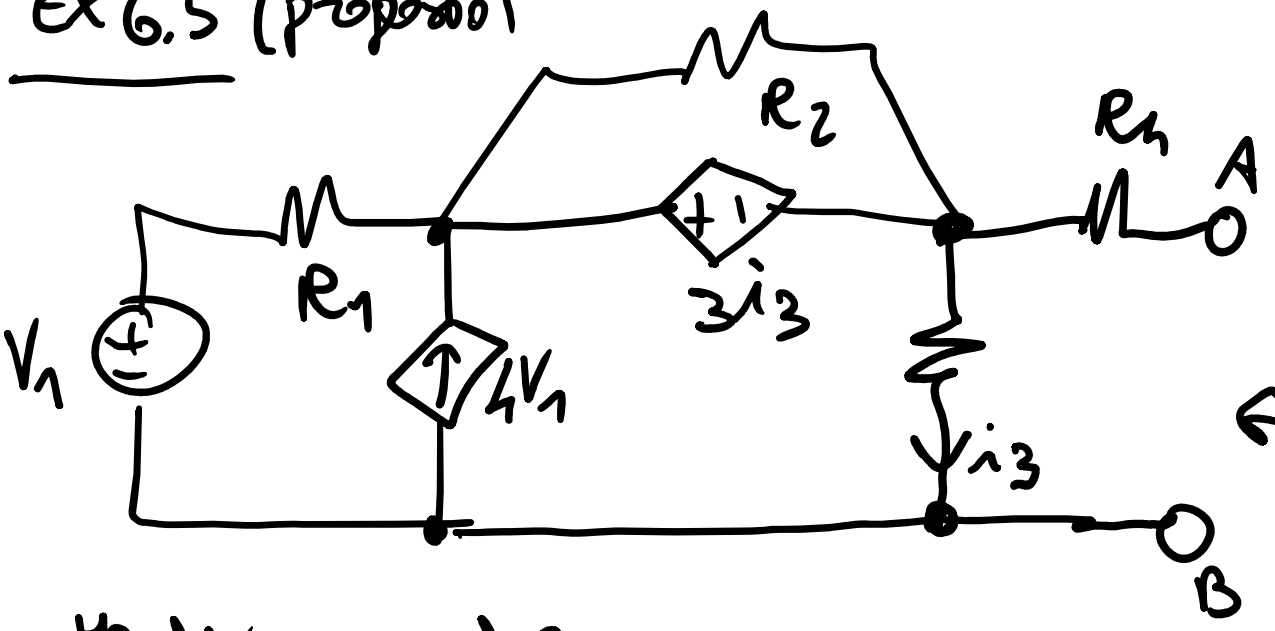
Determinare:

1) thevenin ai morsetti A,B

2) R_L x avere max trasferimento Potenza

[$V_{eq} = 3V$ $R_{eq} = 5\Omega$ $R_L = 5\Omega$]

EX 6.5 (proposto)



NORTON? Thevenin?

Hp) $V_1 = 3V$; $R_{1-h} = 1\Omega$

→ NORTON?
→ Thevenin?

$$\left[V_{eq} = 3V \quad R_{eq} = \frac{6}{5}\Omega \quad I_0 = -\frac{5}{2}A \right]$$