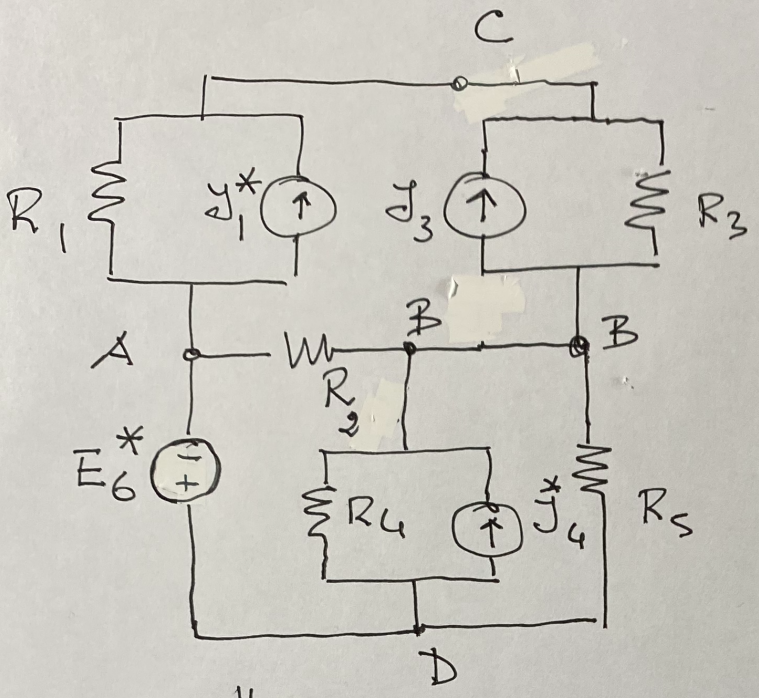
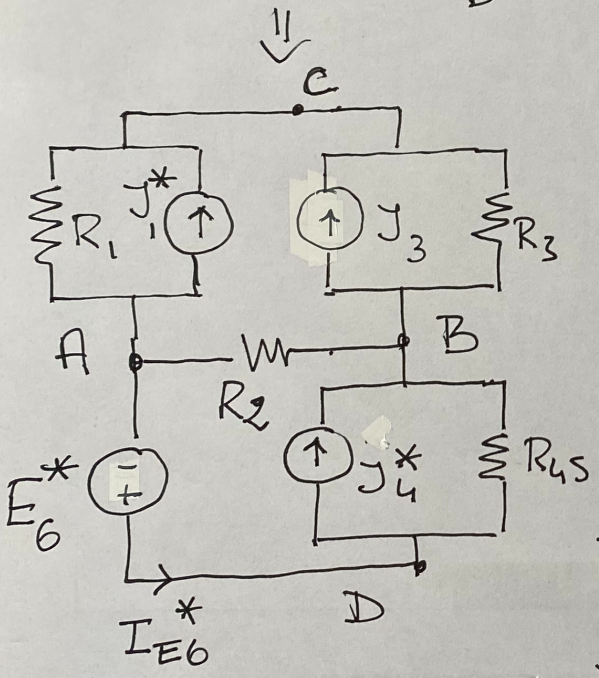
ESERCIZIO ASSEGNATO SABATO 28/03



$J_1^* = E_1 / R_1$

$J_4^* = E_4 / R_4$

$$R_{45} = \frac{R_4 R_5}{R_4 + R_5}$$



$U_A = 0$

B: $\left(\frac{1}{R_2} + \frac{1}{R_3} + \frac{1}{R_{45}}\right) U_B - \frac{1}{R_3} U_C - \frac{1}{R_{45}} U_D = -J_3 + J_4^*$

C: $-\frac{1}{R_3} U_B + \left(\frac{1}{R_1} + \frac{1}{R_3}\right) U_C - 0 \cdot U_D = J_1^* + J_3$

D: $-\frac{1}{R_{45}} U_B - 0\, U_C + \frac{1}{R_{45}} U_D = -J_4^* - I_{E6}^*$

X: $U_D = E_6^*$

$\Rightarrow U_B = 40\ V \quad U_C = -20 \quad U_D = 70$ N.B.: BeC sistema 2×2

$I_{E6}^* = 40$

Poi: $V_{CA} = U_C = E_1 - R_1 I_{E1} \Rightarrow I_{E1} = (E_1 - U_C)/R_1 = -38$ ← RETE ORIGINALE

$$I_{E6} = I_{E6}^* + \frac{E_6}{R_6} = 81$$