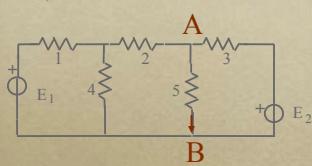


# Esercitazione 6

25

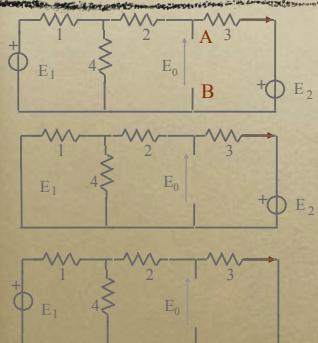
Teorema del generatore equ. di f.e.m:  
Soluzione analitica



$$\begin{aligned} R_1 &= 4,5 \Omega; \\ R_2 &= 10 \Omega; \\ R_3 &= 15 \Omega; \\ R_4 &= 35 \Omega; \quad I_5 = 1,06 \text{ A.} \\ R_5 &= 200 \Omega; \\ E_1 &= 290 \text{ V;} \\ E_2 &= 180 \text{ V.} \end{aligned}$$

42

Teorema del generatore equ. di f.e.m:  
Sovrapposizione

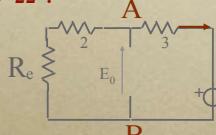


$$\begin{aligned} R_1 &= 4,5 \Omega; \quad I_5 = 1,06 \text{ A.} \\ R_2 &= 10 \Omega; \\ R_3 &= 15 \Omega; \quad E_0 = 219,83 \text{ V;} \\ R_4 &= 35 \Omega; \quad R_i = 7,24 \Omega. \\ R_5 &= 200 \Omega; \\ E_1 &= 290 \text{ V;} \\ E_2 &= 180 \text{ V.} \end{aligned}$$



Teorema del generatore equ. di f.e.m:  
Primo circuito

$$R_e = 3,99 \Omega.$$



$$\begin{aligned} R_1 &= 4,5 \Omega; \quad I_5 = 1,06 \text{ A.} \\ R_2 &= 10 \Omega; \\ R_3 &= 15 \Omega; \quad E_0 = 219,83 \text{ V;} \\ R_4 &= 35 \Omega; \quad R_i = 7,24 \Omega. \\ R_5 &= 200 \Omega; \\ E_1 &= 290 \text{ V;} \\ E_2 &= 180 \text{ V.} \end{aligned}$$

44



**Teorema del generatore equ. di f.e.m:  
Primo circuito**

$R_e = 3,99 \Omega$ .

$I = -6,21 \text{ A}$ .       $E'_0 = 86,88 \text{ V}$ .       $R_1 = 4,5 \Omega$ ;       $I_5 = 1,06 \text{ A}$ .  
 $R_2 = 10 \Omega$ ;       $E_0 = 219,83 \text{ V}$ .  
 $R_3 = 15 \Omega$ ;       $R_4 = 35 \Omega$ ;       $R_i = 7,24 \Omega$ .  
 $R_5 = 200 \Omega$ ;       $E_1 = 290 \text{ V}$ ;  
 $E_2 = 180 \text{ V}$ .

45



**Esercizi: Teorema del generatore equ. di f.e.m.**

$R_e = 14,58$

$R_1 = 4,5 \Omega$ ;       $I_5 = 1,06 \text{ A}$ .  
 $R_2 = 10 \Omega$ ;       $E_0 = 219,83 \text{ V}$ .  
 $R_3 = 15 \Omega$ ;       $R_4 = 35 \Omega$ ;       $R_i = 7,24 \Omega$ .  
 $R_5 = 200 \Omega$ ;       $E_1 = 290 \text{ V}$ ;  
 $E'_0 = 86,86 \text{ V}$ .  
 $E_2 = 180 \text{ V}$ .

46



**Esercizi: Teorema del generatore equ. di f.e.m.**

$R'_e = 14,58 + 4,5$

$I_1 = 15,20$

$I_3 = 8,87$

$E''_0 = 132,97 \text{ V}$ .       $E''_0 = 133,05 \text{ V}$ .

$R_1 = 4,5 \Omega$ ;       $I_5 = 1,06 \text{ A}$ .  
 $R_2 = 10 \Omega$ ;       $E_0 = 219,83 \text{ V}$ .  
 $R_3 = 15 \Omega$ ;       $R_4 = 35 \Omega$ ;       $R_i = 7,24 \Omega$ .  
 $R_5 = 200 \Omega$ ;       $E_1 = 290 \text{ V}$ ;  
 $E'_0 = 86,86 \text{ V}$ .  
 $E_2 = 180 \text{ V}$ .

47



**Esercizi: Teorema del generatore equ. di f.e.m.**

$E_0 = 219,83 \text{ V}$ ;

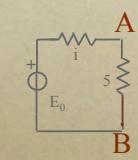
$R_i = 7,24 \Omega$ .

$R_1 = 4,5 \Omega$ ;       $I_5 = 1,06 \text{ A}$ .  
 $R_2 = 10 \Omega$ ;       $E_1 = 290 \text{ V}$ .  
 $R_3 = 15 \Omega$ ;       $E_2 = 180 \text{ V}$ .

48



Esercizi: Teorema del generatore equ. di f.e.m.



$$E_0 = 219,83 \text{ V};$$
$$R_i = 7,24 \Omega .$$

$$R_1 = 4,5 \Omega;$$
$$R_2 = 10 \Omega;$$
$$R_3 = 15 \Omega;$$
$$R_4 = 35 \Omega; I_5 = 1,06 \text{ A.}$$
$$R_5 = 200 \Omega;$$
$$E_1 = 290 \text{ V};$$
$$E_2 = 180 \text{ V.}$$

