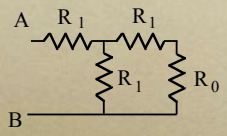
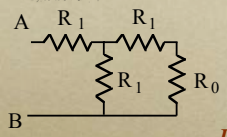
Esercitazione 2

Soluzioni degli esercizi: Es.1



$$R = R_1 + \frac{(R_1 + R_0)\, R_1}{R_1 + R_0 + R_1}$$

Soluzioni degli esercizi: Es.1



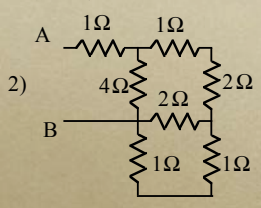
$$R = R_1 + \frac{(R_1 + R_0)\, R_1}{R_1 + R_0 + R_1}$$

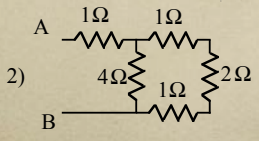
R_0 = 5 Ω;
R_1 = 3 Ω.

R = 5,18 Ω.

Es. 2.3

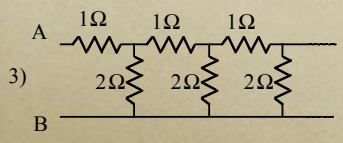
Risposte ad Esercizi : Es.2



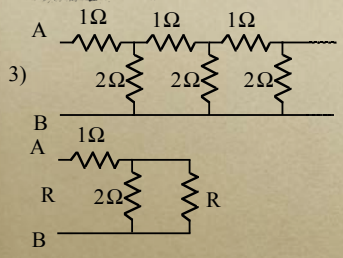


R = 3Ω;

Risposte ad Esercizi : Es.3



Risposte ad Esercizi : Es.3

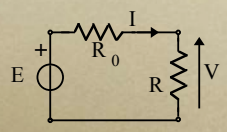


$$R = \frac{2R}{2+R} + 1$$

$R = 2$

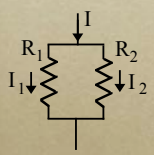
$R = -1$

Esercizi: Es.4



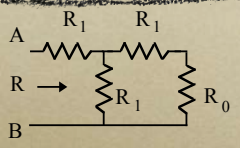
Trovare il valore di R che rende massima la potenza dissipata nella stessa resistenza R.

Esercizi: Es.5



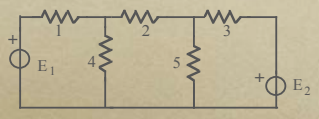
Determinare la ripartizione delle correnti nei due rami imponendo che la potenza dissipata nel circuito sia minima con la condizione $I_1 + I_2 = I$.

Esercizi: Es.6



Determinare il valore di R_1 che rende la resistenza R vista dai due morsetti A e B uguale alla resistenza R_0 di carico.

Esercizi.

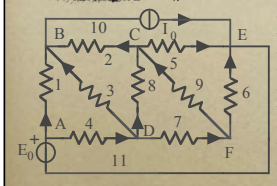


$I_3 = 2{,}14$ A.

$R_1 = 4{,}50\ \Omega$;
$R_2 = 10\ \Omega$;
$R_3 = 15\ \Omega$;
$R_4 = 35\ \Omega$;
$R_5 = 200\ \Omega$;
$E_1 = 290$ V;
$E_2 = 180$ V.

Es 3/2

Esercizi: Es.8



$R_1 = R_2 = R_3 = 1\Omega$;
$R_4 = R_5 = R_6 = 2\ \Omega$;
$R_7 = R_8 = R_9 = 4\ \Omega$;
$E_0 = 10$ V;
$I_0 = 2$ A.

$I_8 = 0{,}56$ A;
$I_1 = 3{,}74$ A;
$I_2 = -1{,}98$ A.

Es 3.3