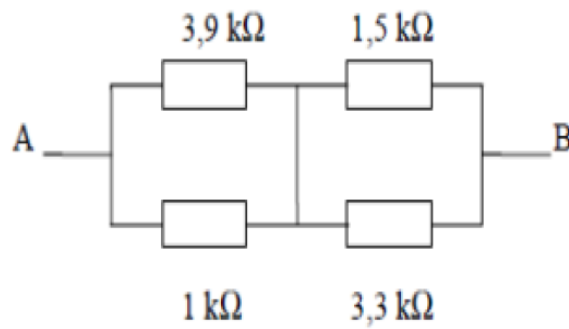


TD 2

(Reminders on the fundamental laws of electricity)

Exercise 1:

The dipole AB consists of four resistors connected together. Determine the equivalent resistance of this dipole.

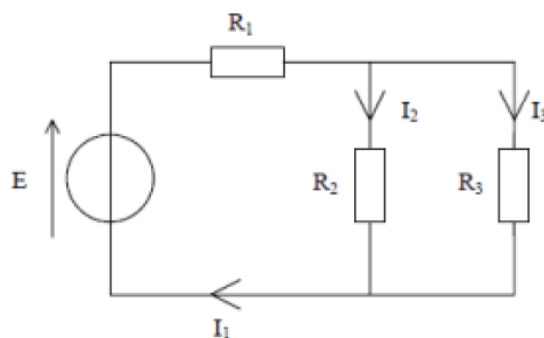


Exercise 2:

Consider the electrical circuit shown in the figure.

Calculate the currents I_1 , I_2 and I_3 .

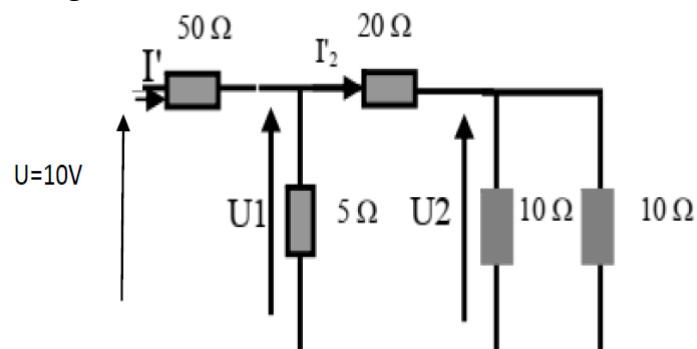
Given: $E=6\text{ V}$, $R_1=270\ \Omega$, $R_2=470\ \Omega$, $R_3=220\ \Omega$



Exercise 3:

Consider the electrical circuit shown in the figure.

- Calculate the currents I' and I_2 .
- Calculate the voltages U_1 and U_2 .



Exercise 4:

The electrical circuit shown in the figure consists of a battery (emf 9 V, internal resistance $2\ \Omega$) connected to a resistor ($8\ \Omega$).

To understand the behavior of the circuit, it is sufficient to determine the characteristic $U(I)$.

