Resistor Circuit (9)

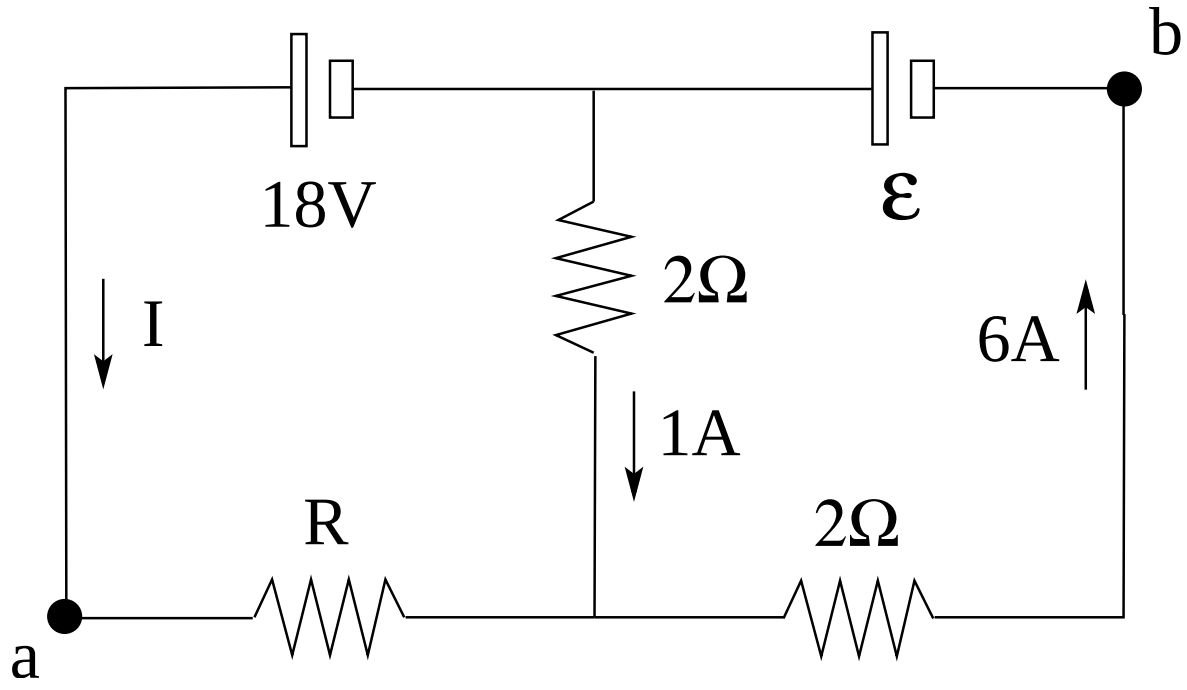
Use Kirchhoff's rules to find

(a) the current I,

(b) the resistance R,

(c) the emf $\mathcal{E}$,

(d) the voltage $V_{ab} \equiv V_b - V_a$.



Resistor Circuit (10)

Consider the electric circuit shown.

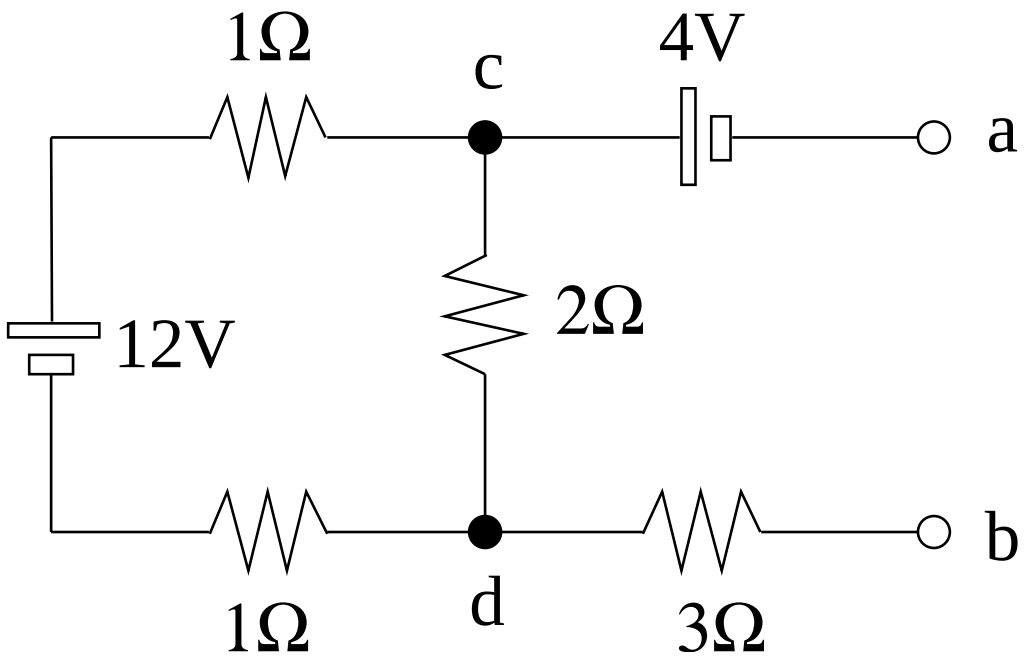
(a) Find the current through the 12V battery.

(b) Find the current through the 2Ω resistor.

(c) Find the total power dissipated.

(d) Find the voltage $V_{cd} \equiv V_d - V_c$.

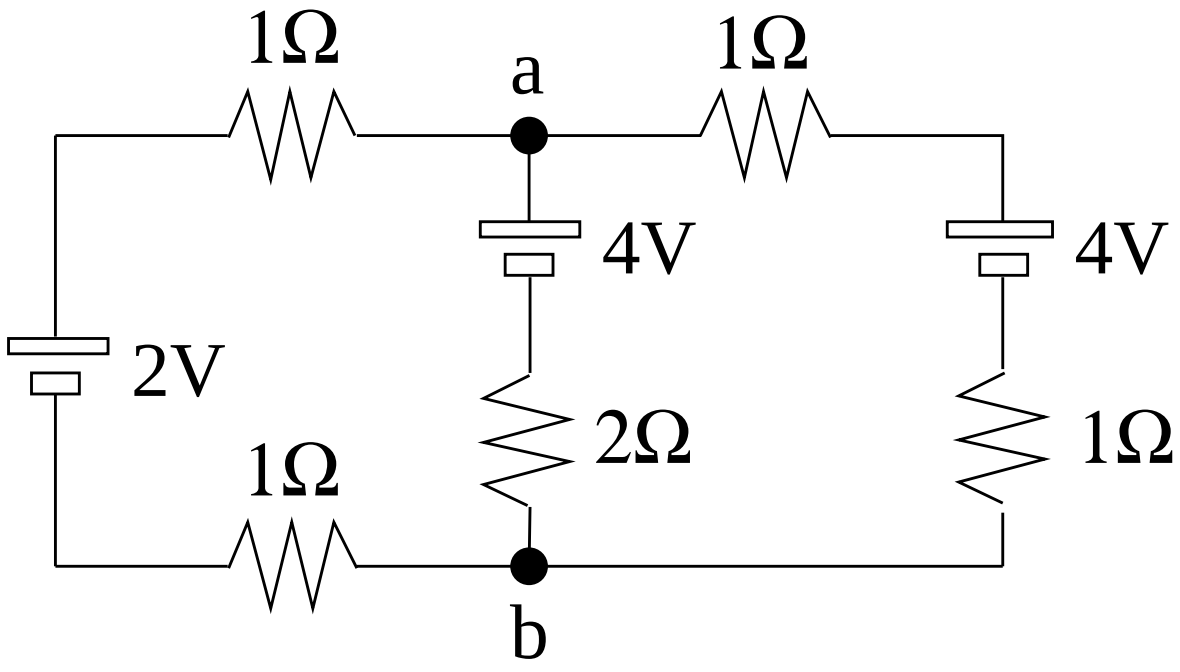
(e) Find the voltage $V_{ab} \equiv V_b - V_a$.



Resistor Circuit (11)

Consider the electric circuit shown.

- Identify all independent currents via junction rule.
- Determine the independent currents via loop rule.
- Find the Potential difference $V_{ab} = V_b - V_a$.



Resistor Circuit (12)

Consider the electric circuit shown.

- Find the equivalent resistance R_{eq} of the circuit.
- Find the total power P dissipated in the circuit.