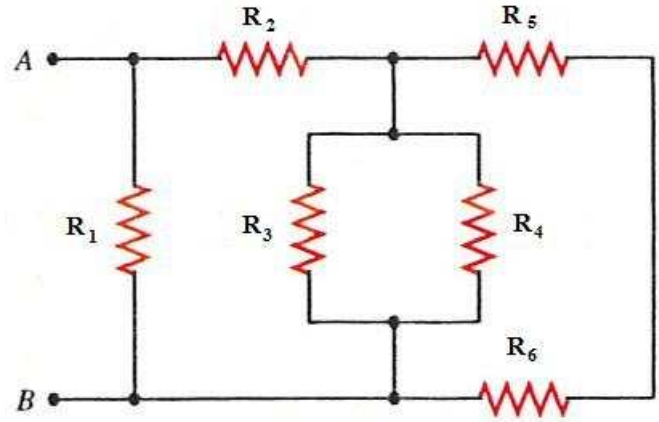
assignment 6
cj-prob2065.problem
Due date: Fri Feb 27 11:59:59 pm 2026 (EST)

Determine the equivalent resistance between the points A and B for group resistors in the drawing if $R_1 = 19.0\ \Omega$, $R_2 = 3.5\ \Omega$, $R_3 = 9.1\ \Omega$, $R_4 = 7.0\ \Omega$, $R_5 = 3.0\ \Omega$, and $R_6 = 5.4\ \Omega$.

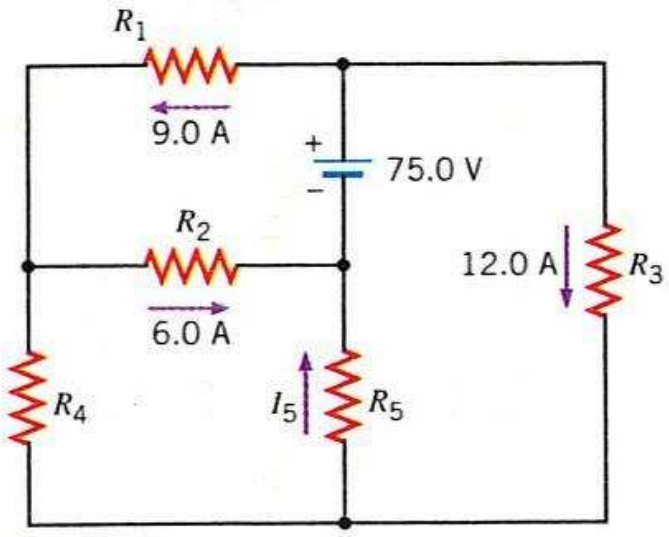
You are correct. Your receipt no. is 163-1477



Kirchhoff, resistor circuit
None of the resistors in the circuit shown in the drawing are connected in series or in parallel with one another. $R_1 = 4.4\ \Omega$, and $R_5 = 2.9\ \Omega$. Find the current I_5.

Incorrect.

Tries 1/10



What is the resistance R_2?

Incorrect.

Tries 1/10

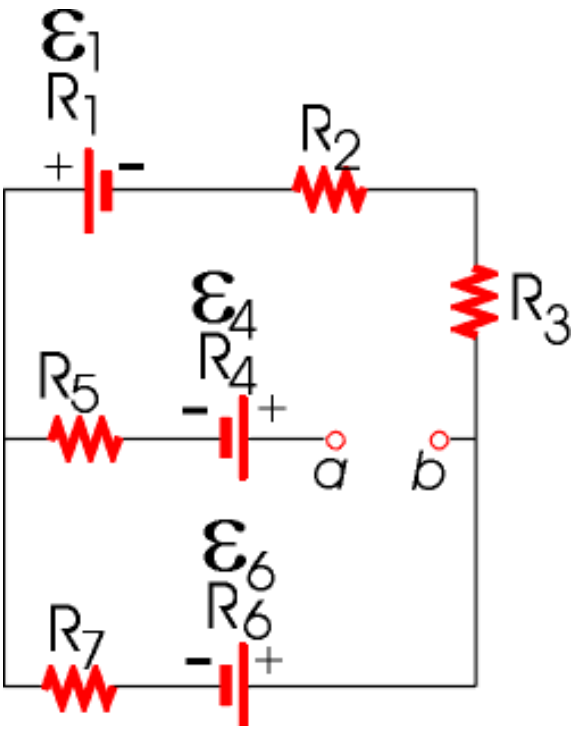
What is the resistance R_3?

Tries 0/10

sf-prob1826a.problem
Determine the magnitude of the potential difference, V_{ab}, for the circuit in the figure below. Note that each battery has an internal resistance, R_1=1.90Ω, R_2=7.90Ω, R_3=2.90Ω, R_4=5.30Ω, R_5=6.00Ω, R_6=4.10Ω and R_7=1.40Ω. Assume that $\mathcal{E}_1$=19.0V and $\mathcal{E}_4$=12.0V and $\mathcal{E}_6$=34.0V, as indicated in the figure.

Incompatible units. No conversion found between "ohm" and the required units.

Tries 0/10



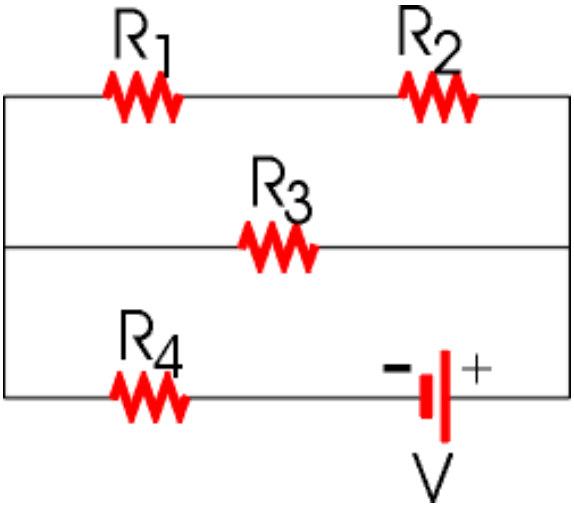
If points a and b are connected by a $R_8 = 6.90\Omega$ resistor, what is the magnitude of the current through this resistor?

Incompatible units. No conversion found between "ohm" and the required units.

Tries 0/10

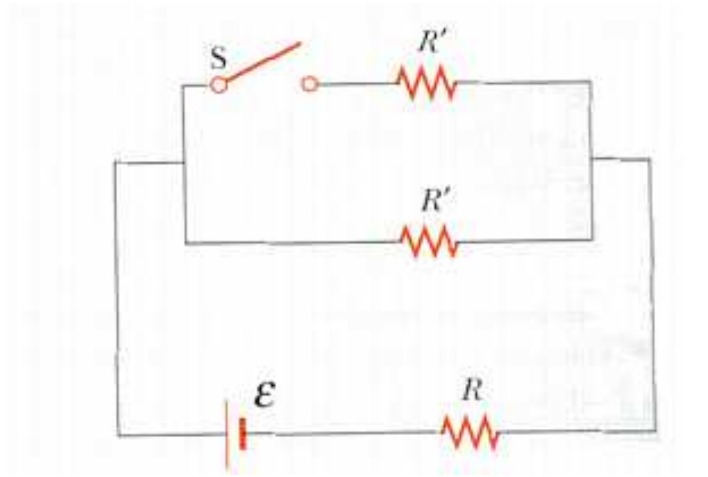
sf-prob1822.problem
Four resistors, $R_1 = 33.0\Omega$, $R_2 = 51.0\Omega$, $R_3 = 86.0\Omega$ and $R_4 = 17.0\Omega$, are connected to a battery with a terminal voltage of 12.0V, as shown in the figure below. Determine the power dissipated in the $R_2 = 51.0\Omega$ resistor.

Tries 0/10

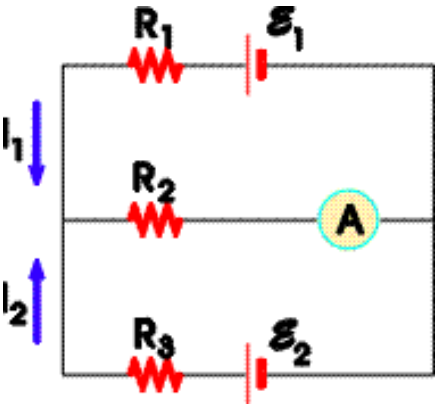


sb-prob2814.problem
The power delivered to the top part of the circuit shown below does not depend on whether the switch is opened or closed. If R=1.17ohm, what is R'? Neglect the internal resistance of the voltage source.

Tries 0/10



sb-prob2818a.problem
The ammeter shown in the figure below, reads 1.89A. $\mathcal{E}_1$=18.0V, R_1=6.00ohm, R_2=4.00Ω and R_3=2.00Ω.



Calculate I_1.

Tries 0/10

Calculate I_2.

Tries 0/10

Calculate $\mathcal{E}_2$.

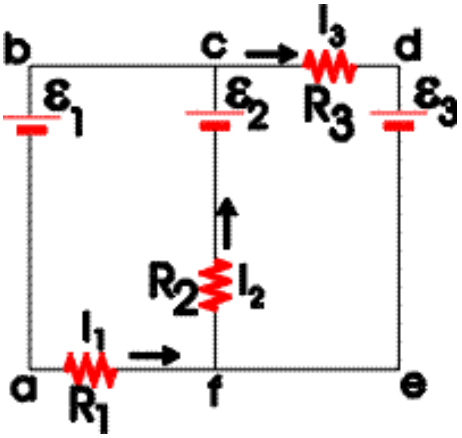
Tries 0/10

sb-prob2816.problem
7. Two resistors connected in series have an equivalent resistance of 730Ω. When they are connected in parallel, their equivalent resistance is 139Ω. Calculate the resistance of each resistor. Enter the smaller one first.

Tries 0/10

sb-prob2822a.problem
8a. Using Kirchhoff's rules, calculate the current I_1 in resistor R_1, using the directions indicated in the figure below. Assume that R_1 = 3.00kΩ, R_2 = 5.00kΩ, R_3 = 7.00kΩ, $\mathcal{E}_1$ = 80.0V, $\mathcal{E}_2$ = 70.0V and $\mathcal{E}_3$ = 95.0V.

Tries 0/10



8b. Calculate the current I_2, in resistor R_2, using the directions shown.

Tries 0/10

8c. Calculate the current I_3, in resistor R_3, using the directions shown.

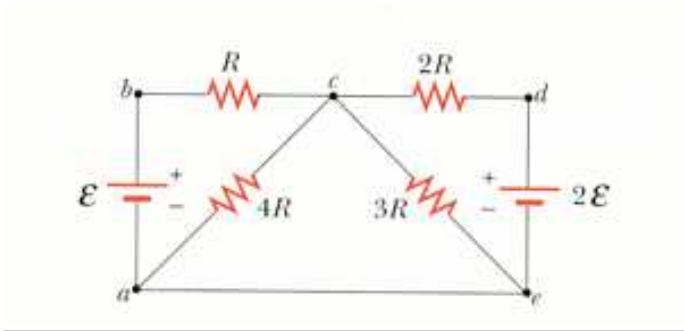
Tries 0/10

8d. Calculate the magnitude of the potential difference between points c and f.

Tries 0/10

sb-prob2823.problem
If R=1.33E+3Ω and ϵ=215 V, determine the magnitude of the current in the horizontal wire between a and e.

Tries 0/10



sb-prob2830a.problem
A 2.03nF capacitor with an initial charge of 5.28uC is discharged through a 1.18kΩ resistor. Calculate the current through the resistor 7.40us after the resistor is connected across the terminals of the capacitor.

Tries 0/10

What charge remains on the capacitor after 6.40us?

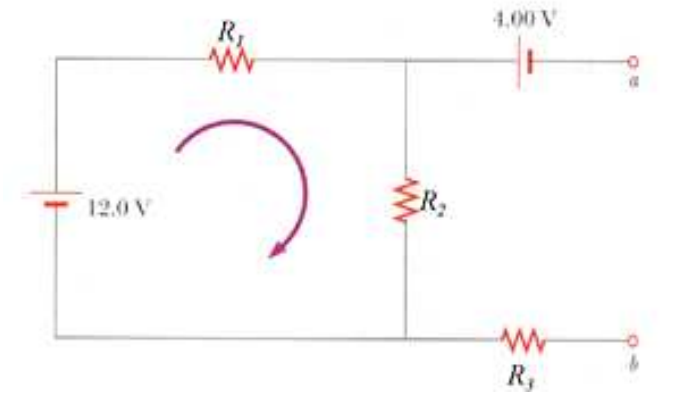
Tries 0/10

What is the maximum current in the resistor?

Tries 0/10

sb-prob2853.problem
Calculate the magnitude of the potential difference between points a and b in the figure if R_1=2.27Ω, R_2=4.42Ω,and R_3=10.00Ω.

Tries 0/10



sb-prob2852.problem
A battery has an emf of 8.38V and an internal resistance of 1.10Ω. What resistance connected across the battery will absorb from it a power of 11.6W? Enter both of the two possible answers, the larger one first.

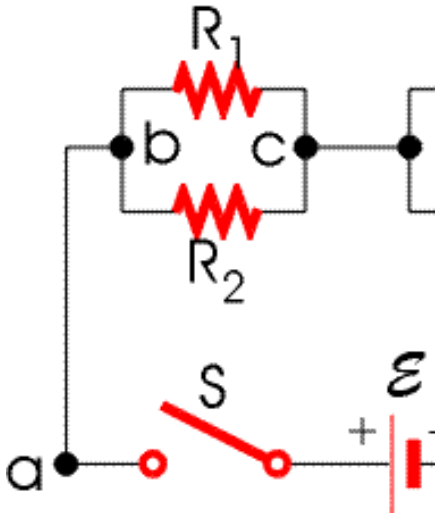
Tries 0/10

sb-prob2854.problem

A 1.40E-5F capacitor is charged by a 10.0V battery through a resistance R. The capacitor reaches a potential difference of 4.84V at a time 2.23s after charging begins. Find R.

Tries 0/10

sb-prob2872a.problem
The circuit in the figure below contains two resistors, R_1 = 4.00kΩ and R_2 = 5.00kΩ, and two capacitors, C_1 = 4.00uF and C_2 = 5.00uF, connected to a battery with emf $\mathcal{E}$ = 100V. If no charges exist on the capacitors before switch S is closed, determine the charge q_1 on capacitor C_1 1.00ms after the switch is closed.



Tries 0/10

Determine the charge q_2 on capacitor C_2 1.00ms after the switch is closed.

Tries 0/10