



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



Circuit puzzles

Series Puzzle 1

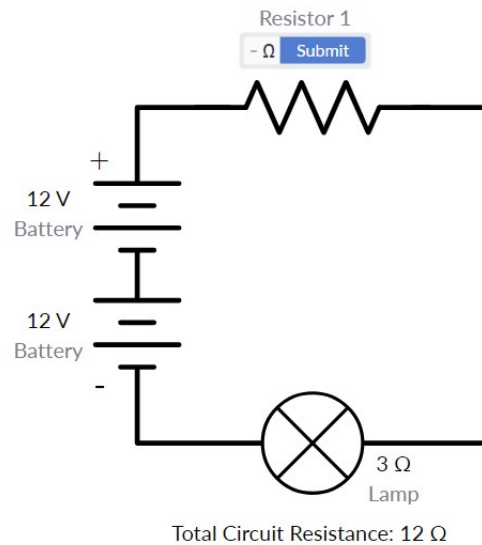
Can you type in the missing values? Pay attention to the units!

What is the voltage drop across Resistor 1? -- V Submit

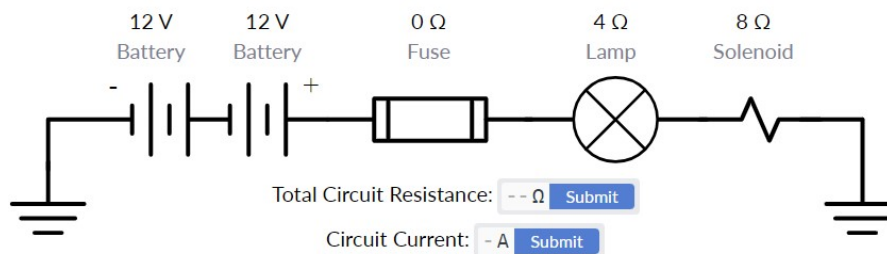
What if...?

If the value of Resistor 1 drops to 0Ω , what would happen to the lamp?

- The lamp would become brighter, because the current in the circuit would increase without the extra resistance.
- The lamp would become dimmer, because the current in the circuit would decrease without the extra resistance.



Circuit Current: - A Submit



Series Puzzle 2

How about this circuit? Enter the missing values.

What is the voltage drop across the solenoid? -- V Submit

How much power is the lamp using? -- W Submit

Series Puzzle 3

Circuit Resistance:

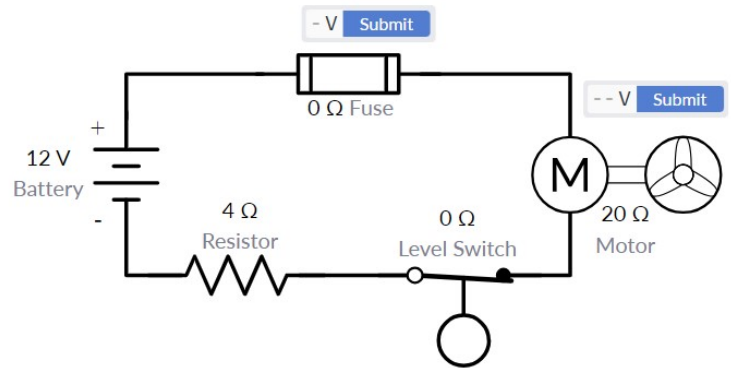
-- Ω

Circuit Current:

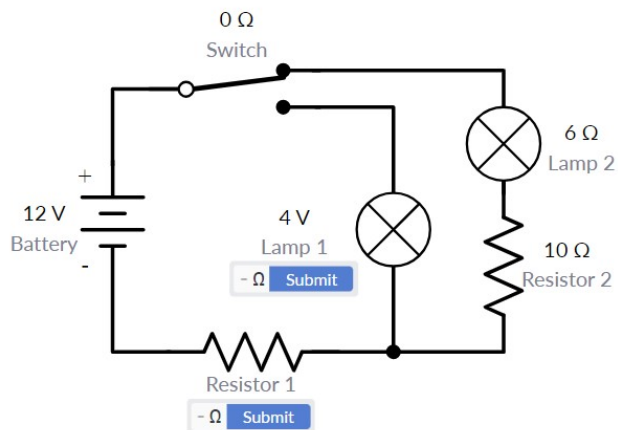
- . - A

What if...?

If the switch is opened, how many watts will the motor use? - W



Series Puzzle 4



Circuit Current:
500 mA

(when switch is toggled as shown in schematic)

What if...?

If the switch is operated to the opposite position, what will the circuit current be?

---- mA