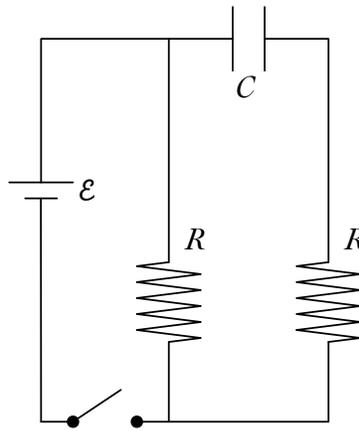


1. A cylindrical wire has a radius r and a length l . If both r and l are doubled, what happens to the value of the resistance of the wire?



2. Consider the circuit above, and assume the battery has no internal resistance. Just after the switch is closed, what is the current in the battery? What is the current after a very long time?