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GCSE Physics – Particles

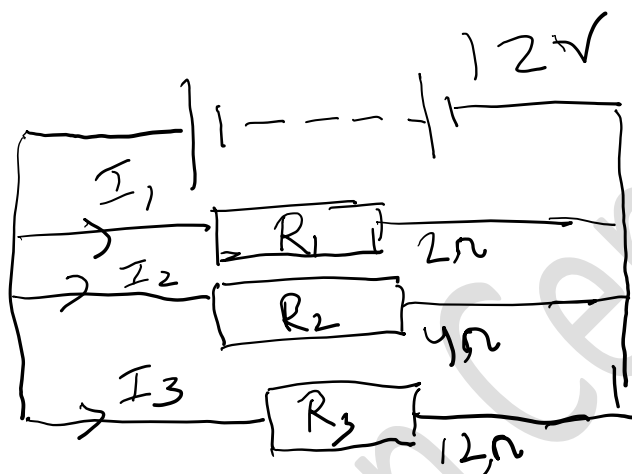
P4: Electric Circuits – Assignment 3

Assignment Questions

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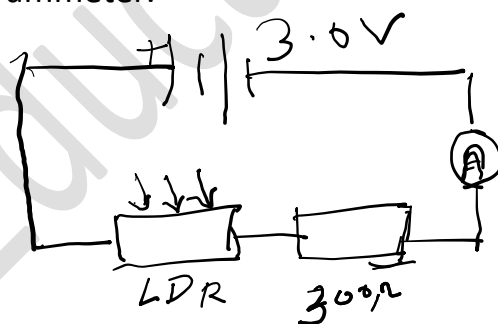
P4 : Electric Circuits Assignment-3

Q1: In the following circuit diagram calculate the current through each resistor. Calculate the current through the battery.



Q2: If the 12 ohms resistor above is replaced by the 10 ohms resistance. Calculate the new battery current.

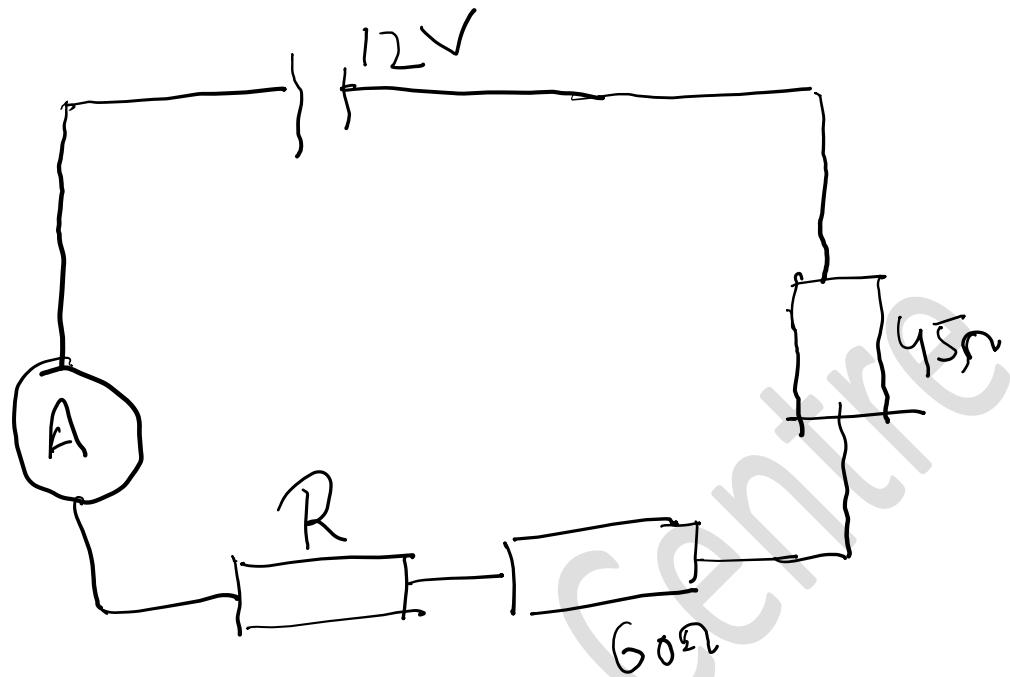
Q3: The figure below shows a Light Dependent Resistor (LDR) in a series with a 300 ohms resistor a 3.0 V battery and ammeter.



With LDR in daylight ammeter reads 0.0010 A .

- Calculate the potential difference across the 300 ohms resistor when the current through it is 0.0010 A.
- Find the potential difference across the LDR when ammeter reads 0.0010 A.
- If LDR is then covered explain what will happen to the ammeter reading.

Q4 : A student set up the electrical circuit as below.



Ammeter shows reading of 0.10 A

- a) Calculate the potential difference across 45 ohms resistance.
- b) Find the value of R