

# Electronics

Measuring Voltage

# Lecture Contents

- How to measure voltage

# Turning the Multimeter Off

- Turn the power off when you are finished using the multimeter.
- The meter will also first beep, then turn itself off if it hasn't been used for a time.



# Measuring Voltage

- When measuring voltage, insert:
  - the **black** lead into the “COM” (*common*) port, and
  - the **red** lead into the “V  $\Omega$   $\vdash \vdash$ ” port.
- Yes, these are the same ports as we use to measure resistance.



By convention:

- **Black** is used for *negative* (or *ground*)
- **RED** is used for *positive* voltage

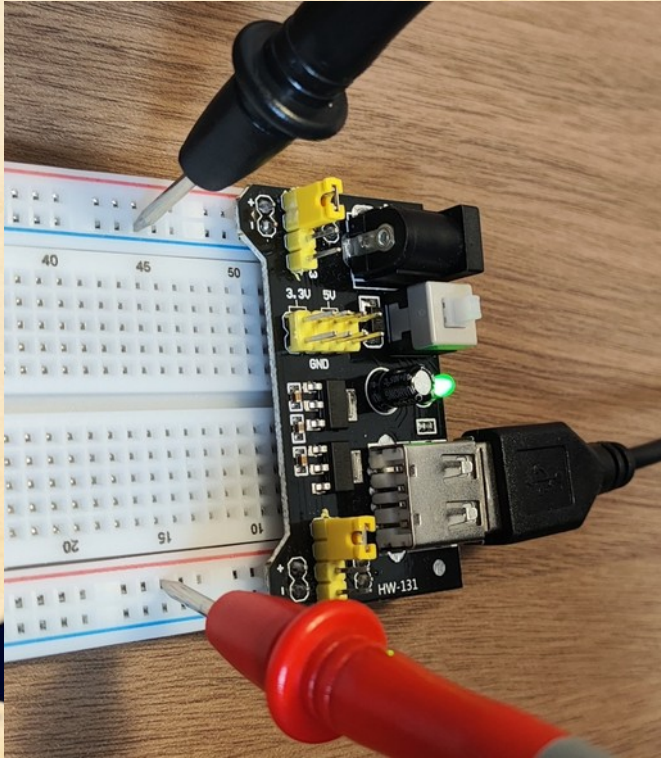
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- To measure voltage, set the dial to the appropriate value.
- Since we have a 5 volt power supply, in most cases, the 20V setting will be appropriate.



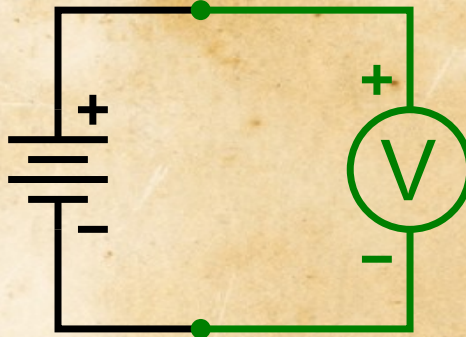
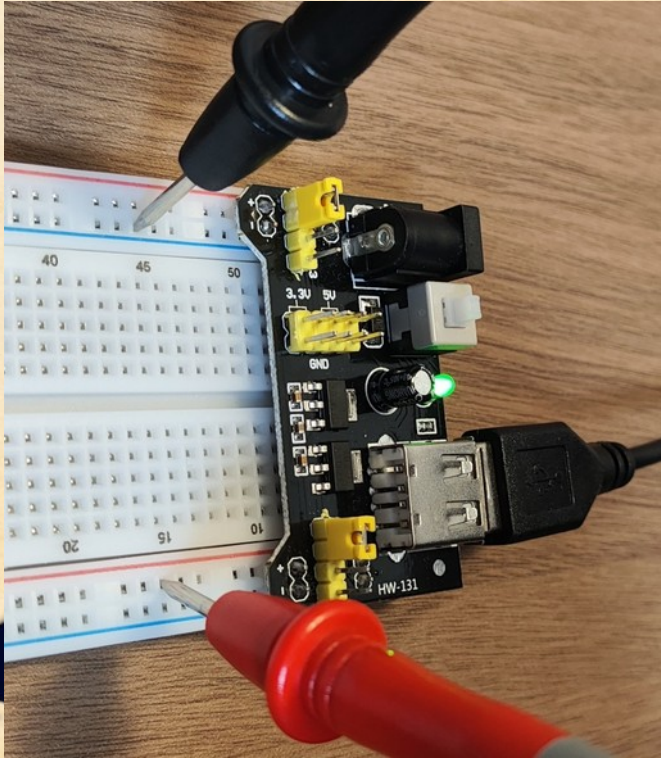
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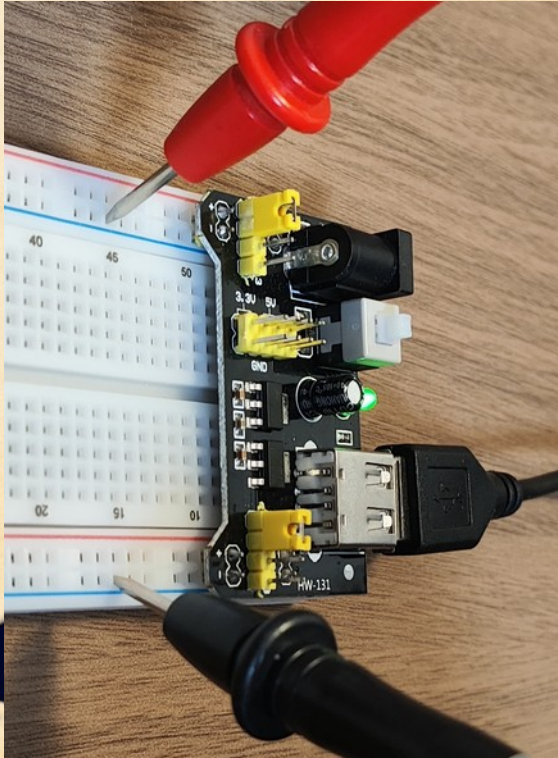
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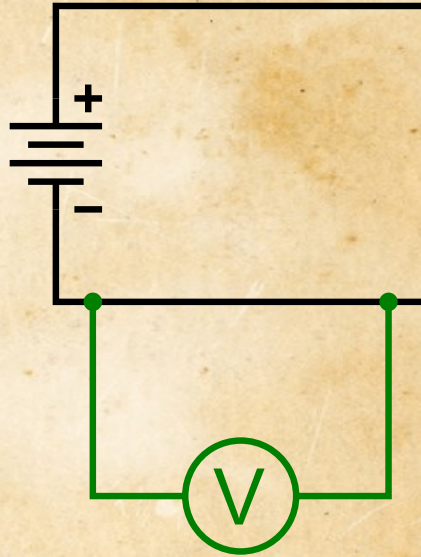
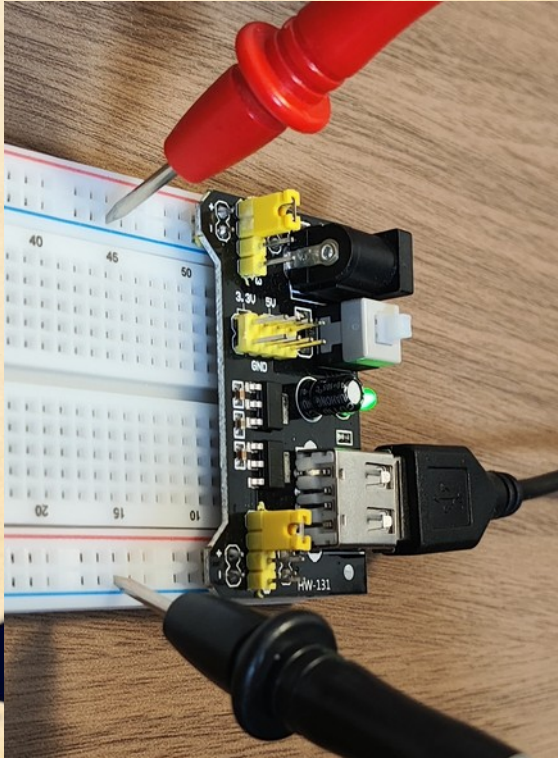
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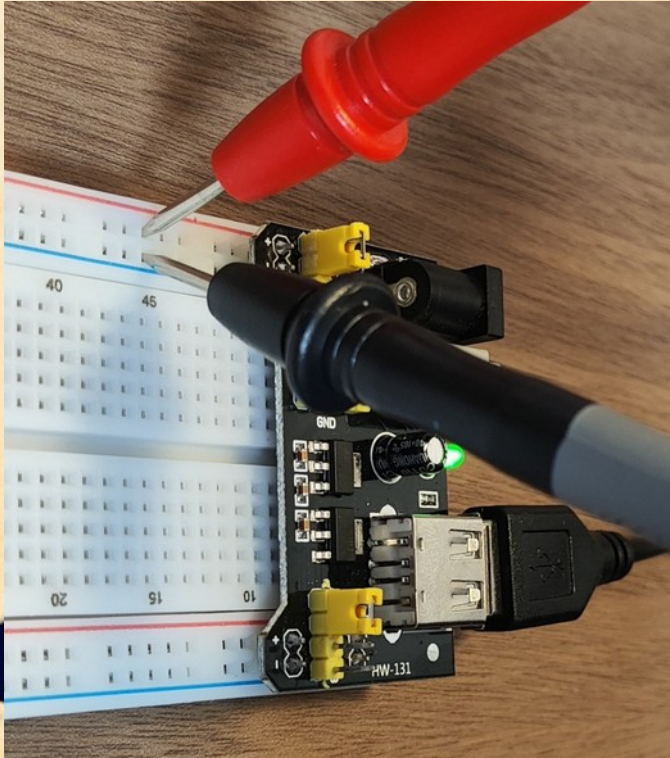
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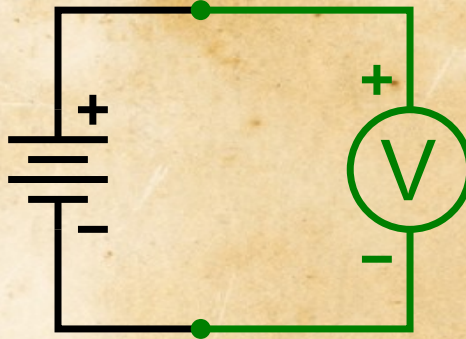
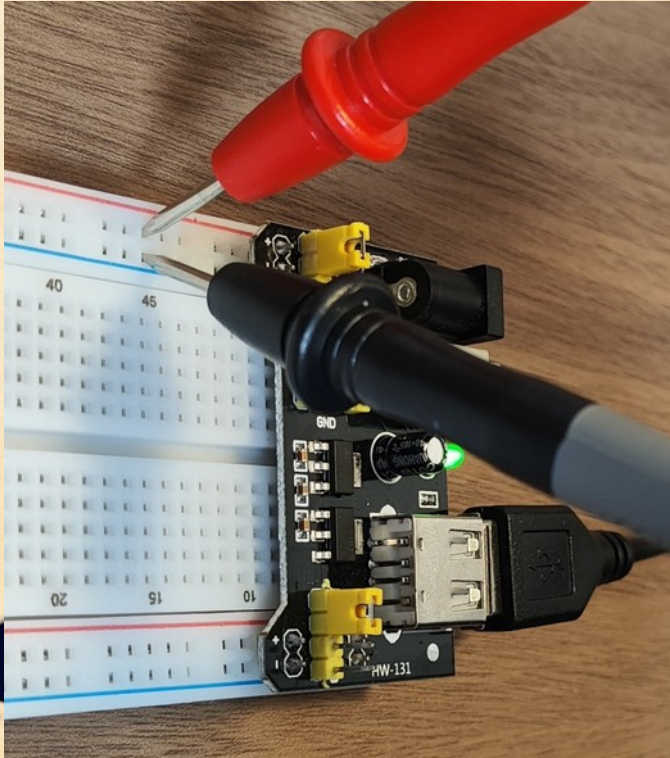
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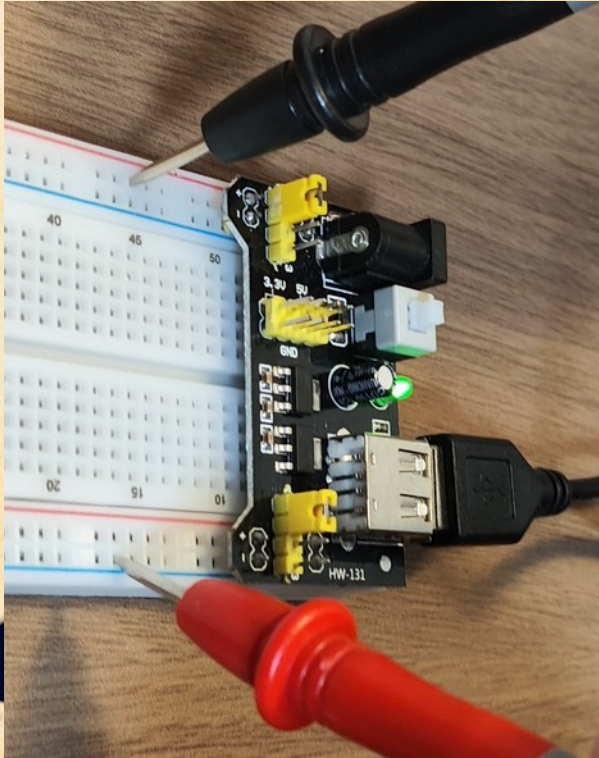
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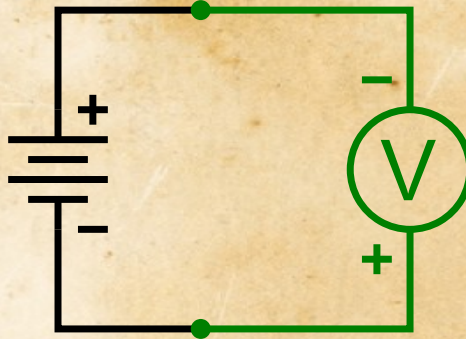
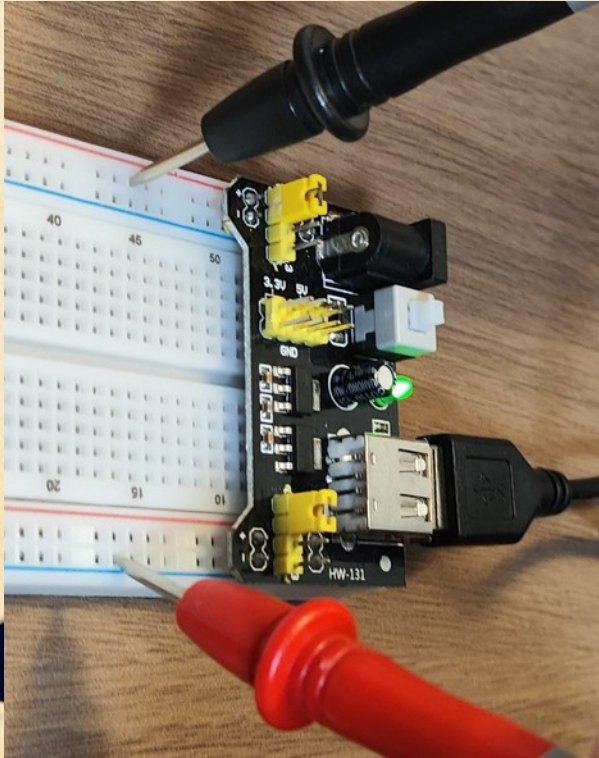
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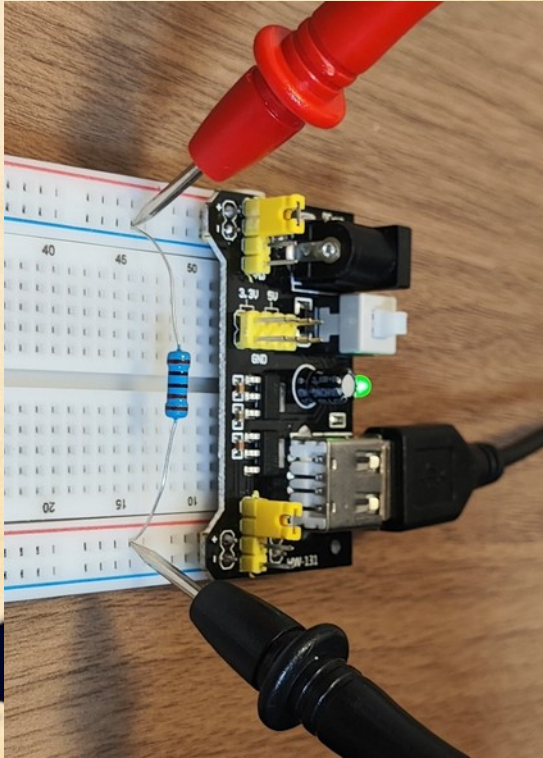
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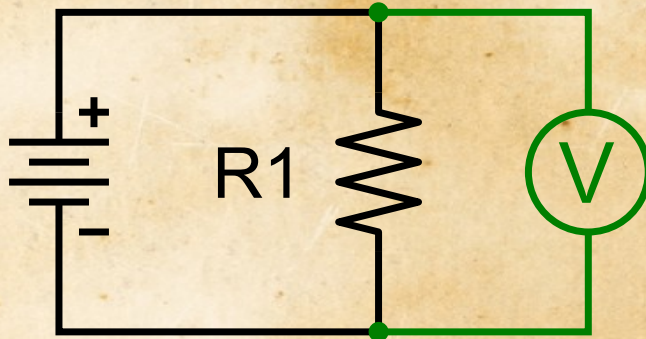
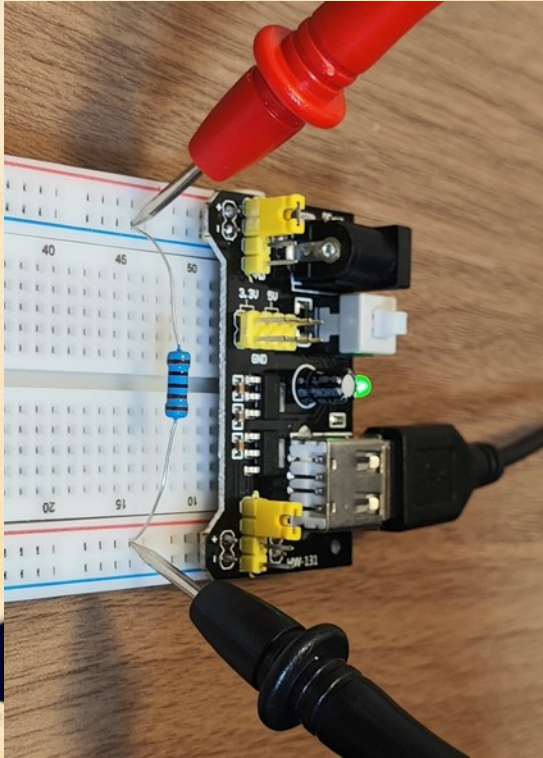
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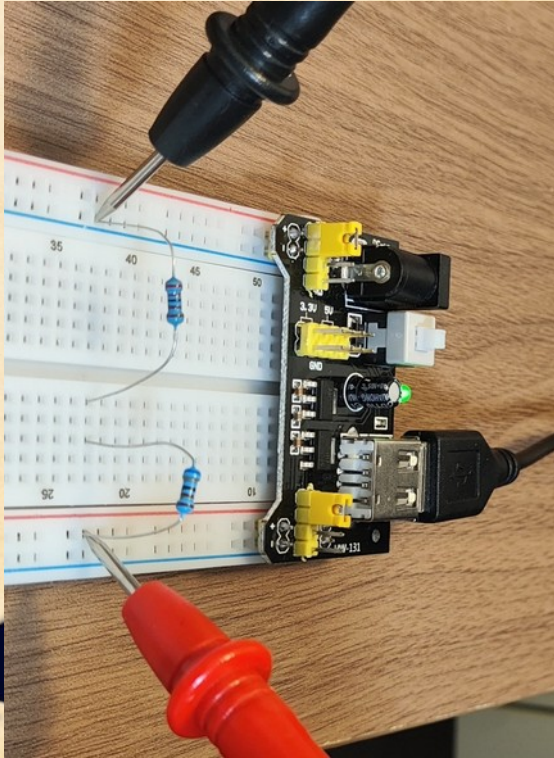
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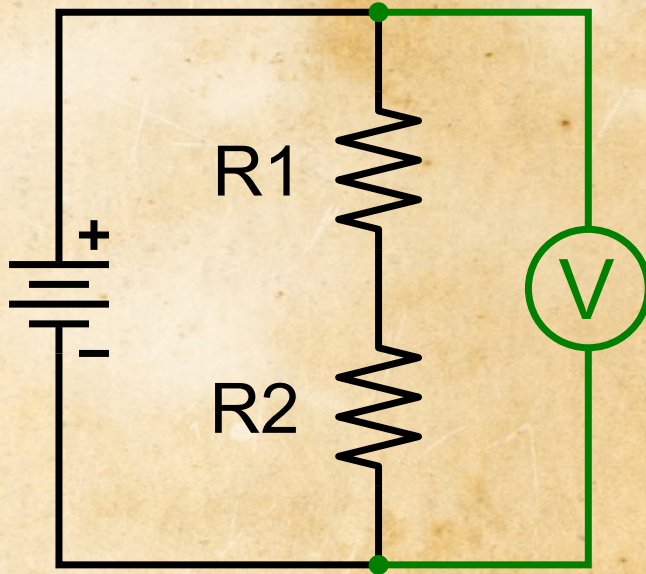
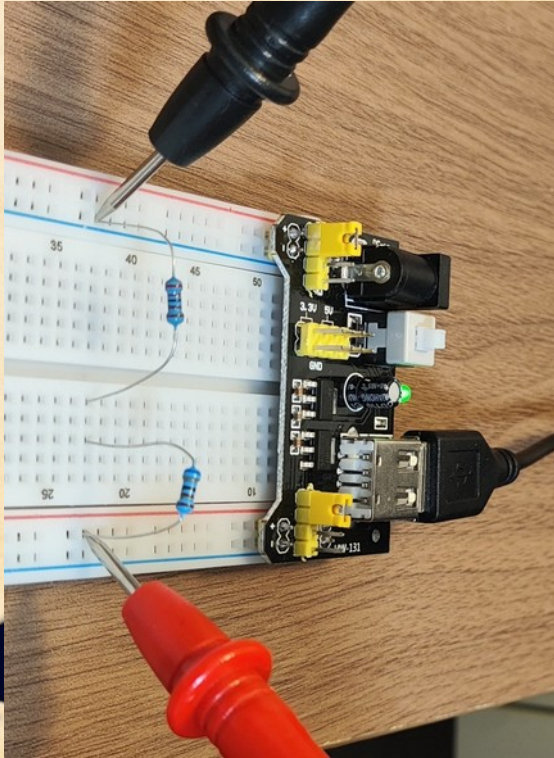
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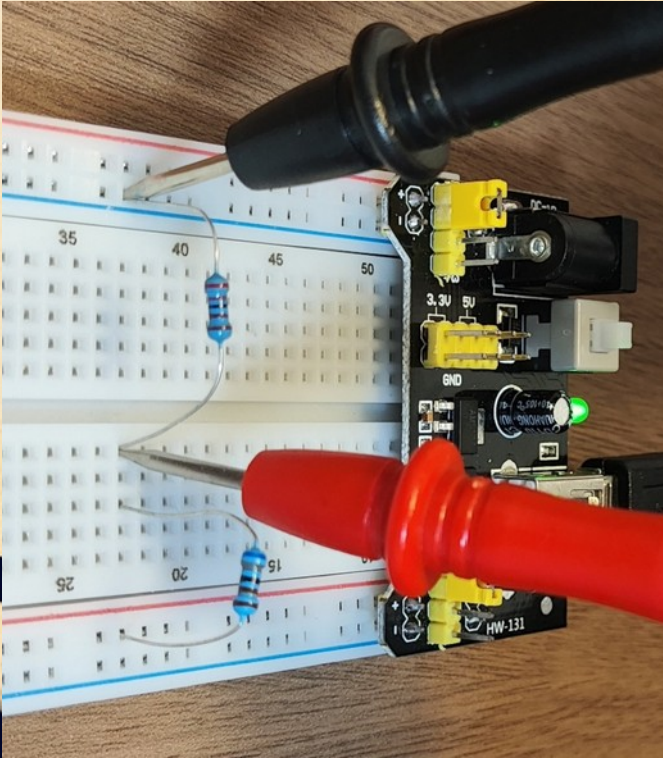
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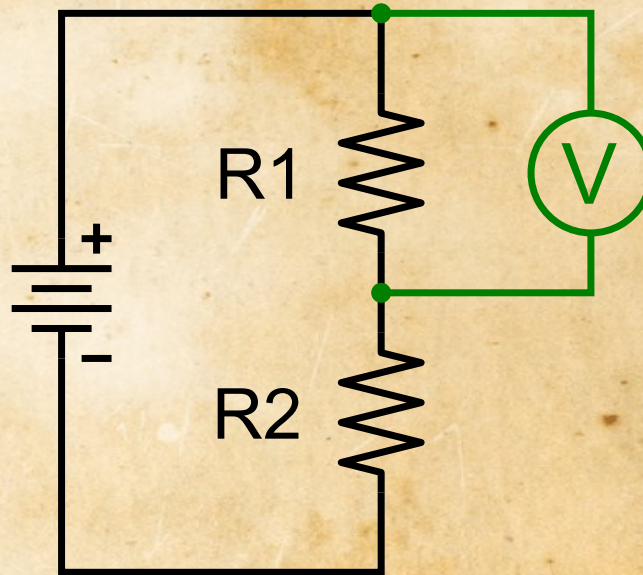
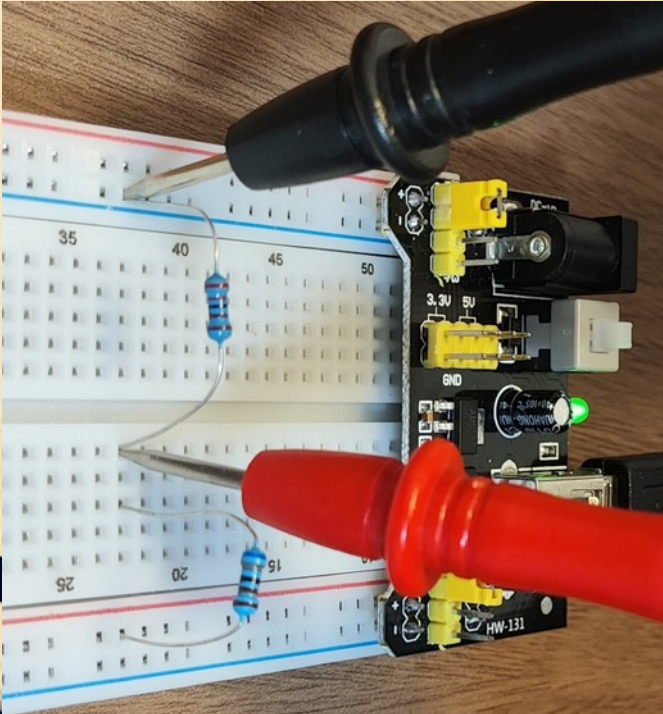
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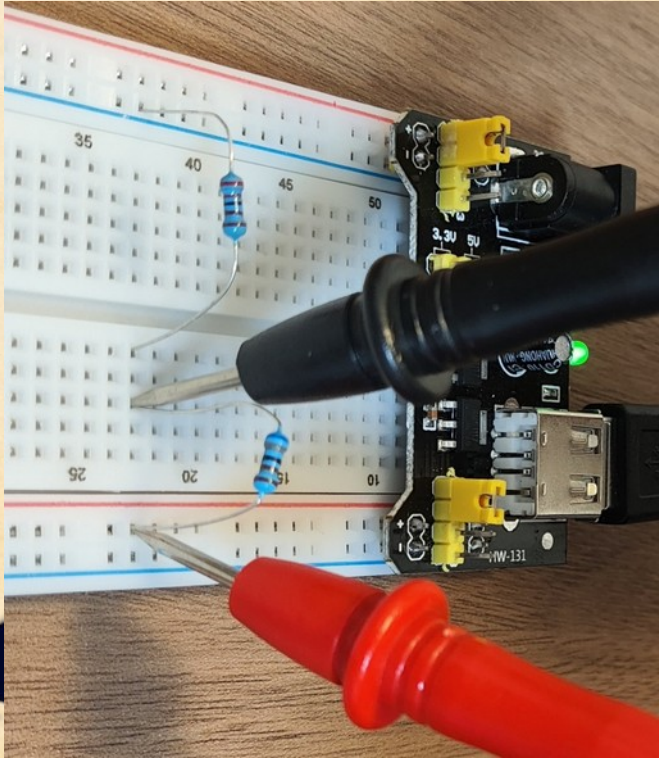
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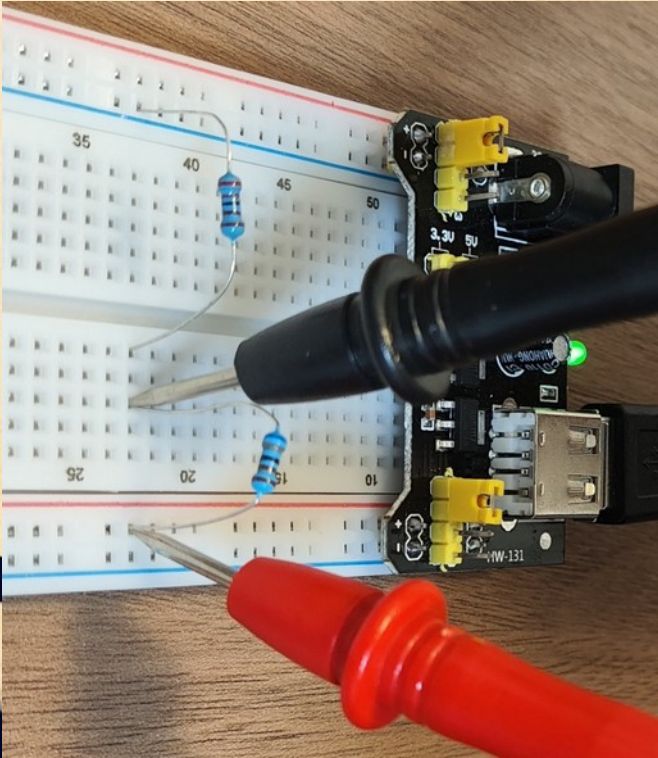
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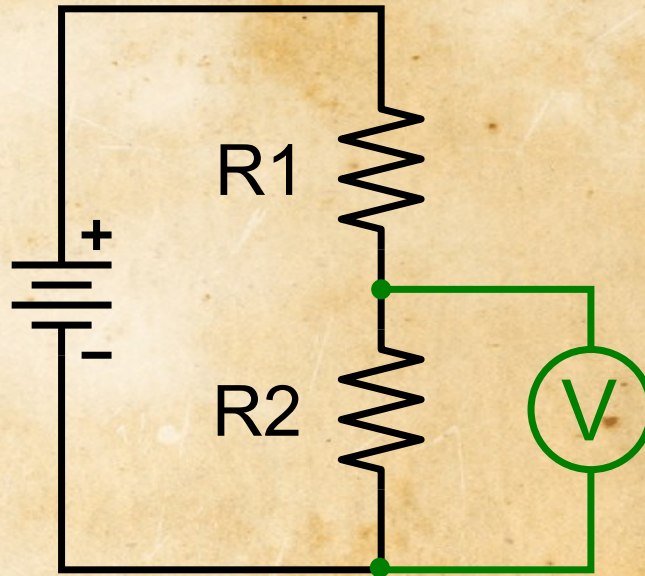


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$$5.19\text{ V} - 1.26\text{ V} = 3.93\text{ V}$$



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