Class 2: Circuit Analysis Techniques

Activity 2 – KCL, KVL, Series and Parallel Resistors

January 13th, 2022

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Intro to ECSE

Model of a Car Battery
Lights ON and Engine OFF

12 January 2022

Ohm's Law

What is so cool about resistors?

What about power absorbed by resistors

- Resistors are passive linear elements
- They can only absorb power
- Power relationships:

Kirchoff's Current Law (KCL)

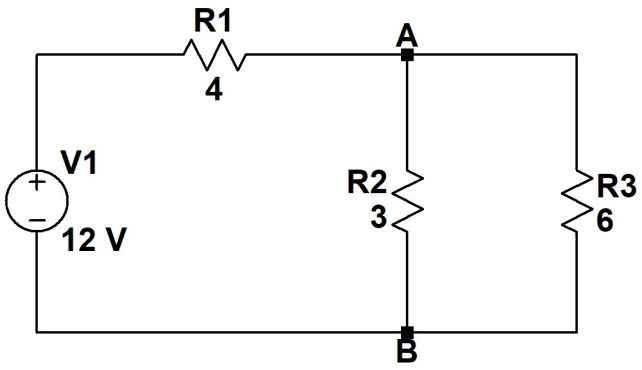
Kirchoff's Voltage Law (KVL)

Resistors in Series

Resistors in Parallel

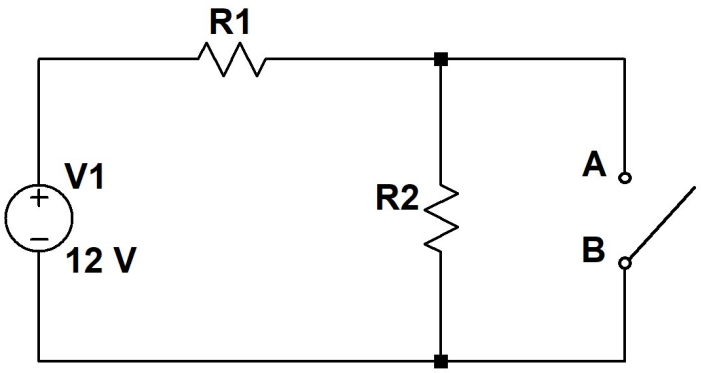
Example 1: Circuit Analysis

Find current through R2 and R3



Example 2: Circuit Analysis

Find current through R1



Activity 2: KCL, KVL, Series and Parallel Resistors

- Go to the class website
- Look under class 2
- Find activity 2
- Do the activity
  - Individual submission for activity 2
  - Encouraged to discuss with others in the class on WebEx Teams
- Answer the activity using template (attached class 2)
- When complete – upload to Gradescope
  - Due Thursday, February 4th at 11:59 pm
  - Use guides to learn how to upload documents