simple EE problem

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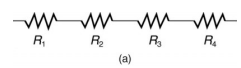
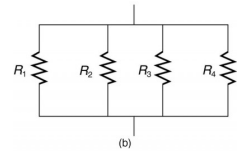
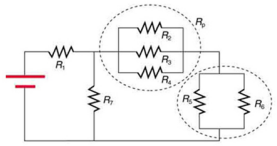
- consider an electrical circuit with resistors, which can be placed in
  - series
  - parallel
  - combinations







see: https://courses.lumenlearning.com/physics/chapter/21-1-resistors-in-series-and-parallel/

simple EE problem

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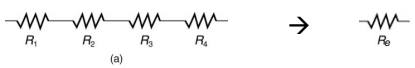
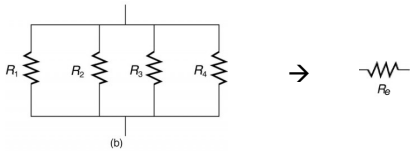
- using Ohm's law any combination of resistors can be replaced by a single equivalent resistor

series:



$R_e = R_1 + R_2 + R_3 + R_4$

parallel:



$1/R_e = 1/R_1 + 1/R_2 + 1/R_3 + /1R_4$

simple EE problem

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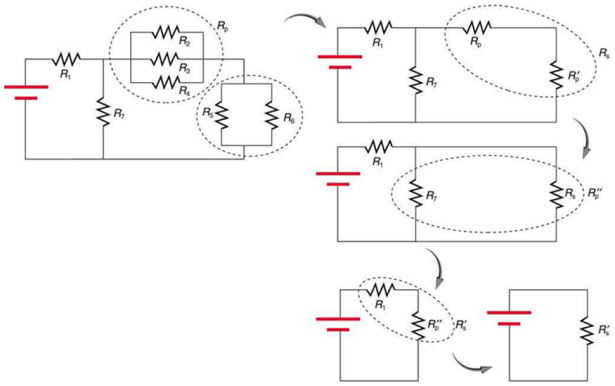
- using Ohm's law any combination of resistors can be replaced by a single equivalent resistor



simple EE problem

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- we will write a program that computes the equivalent resistance
- as we add resistors (the arrows are reversed)