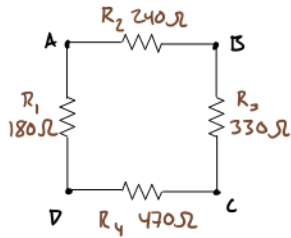
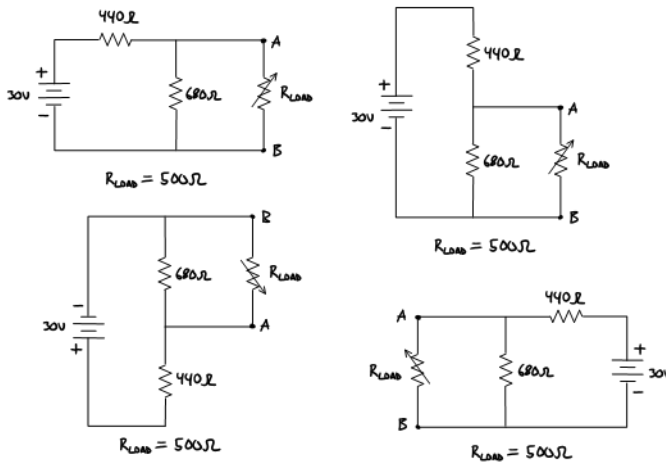


## DC Thevenin's Theorem

Determine  $R_{AD}$ ,  $R_{BC}$ , and  $R_{BD}$ .



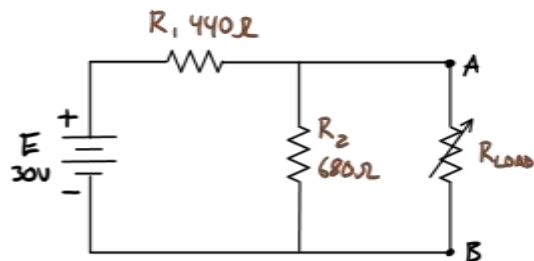
Determine the voltage across, current through, and power dissipated by variable load resistor  $R_{LOAD}$  when  $R_{LOAD}$  is set to  $500\Omega$ .



Determine the voltage across, current through, and power dissipated by variable load resistor  $R_{LOAD}$  in the above circuits when  $R_{LOAD}$  is set to  $200\Omega$ ,  $800\Omega$ ,  $880\Omega$ ,  $8.8\Omega$ ,  $88\Omega$ , and  $8.8k\Omega$ .

Illustrate a Thevenin's Equivalent circuit and describe the steps necessary to calculate  $E_{TH}$  and  $R_{TH}$ .

Determine the Thevenin's equivalent circuit seen by variable load resistor  $R_{LOAD}$ .



Identify how to experimentally determine  $E_{TH}$  and  $R_{TH}$  using real world components and instrumentation.

Identify advantages of Thevenin's Theorem.