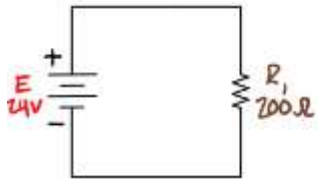


Instrument Loading Effects

Compare and contrast ideal ammeters and voltmeters with non-ideal ammeters and voltmeters.

Compare and contrast ideal sources with non-ideal sources.

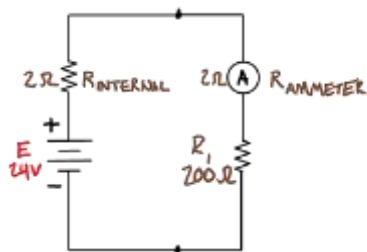
Determine the electrical properties for this system when every element is considered ideal in nature.



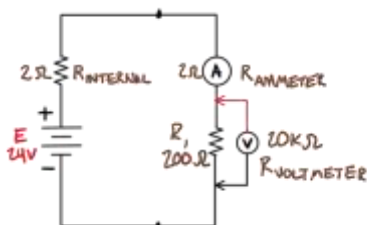
Determine the electrical properties for this system given a non-ideal source with 2Ω of internal resistance.



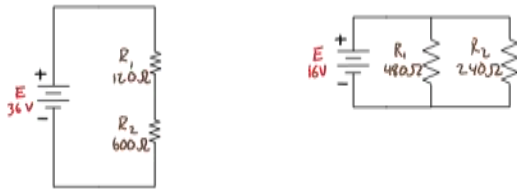
Determine the electrical properties of this system given a non-ideal source with 2Ω of internal resistance and a non-ideal ammeter with 2Ω of internal resistance.



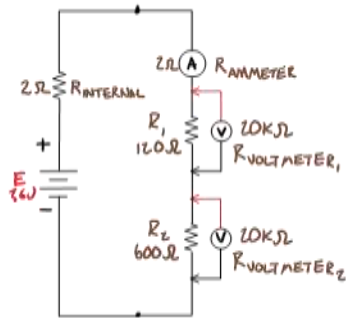
Determine the electrical properties of this system given a non-ideal source with 2Ω of internal resistance, a non-ideal ammeter with 2Ω of internal resistance, and a non-ideal voltmeter $20k\Omega$ of internal resistance.



Determine the electrical properties for all elements in these systems given each element is considered ideal in nature.



Determine the electrical properties for all elements in this system given the placement of non-ideal elements in the following locations.



Determine the electrical properties for all elements in this system given the placement of non-ideal elements in the following locations.

ERROR at 13:49 ammeter 1 and 2 have 5Ω of internal resistance.

