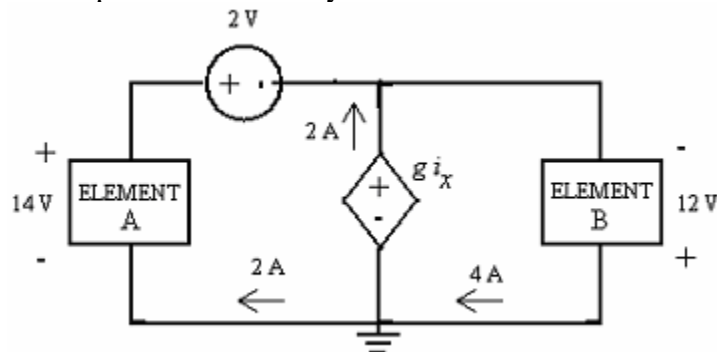


ECE 201: Linear Circuit Analysis I:

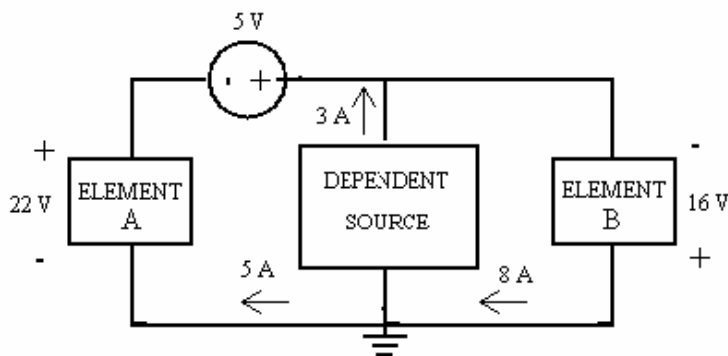
Exercise: Chapter 2

Design Problem(s)

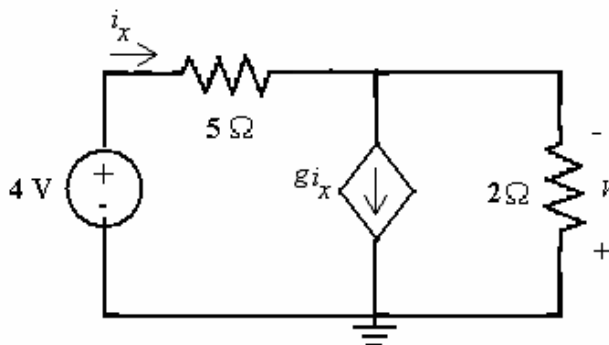
- In the circuit below, determine the constant g so that the power absorbed by the circuit elements equals the power delivered by the circuit elements.



- In the circuit below, determine the kind of dependent source needed to fulfill the specification that the circuit is a valid circuit, i.e. the power absorbed by the circuit elements equals the power supplied by the circuit elements.



- The circuit below has an unspecified dependent source constant. Select the constant g such that the output voltage v is 16 V.



4. The circuit shown below is used to supply energy to a heater. It is specified by the heater manufacturer that 3.53 mW of power is to be supplied to the heater. Determine the appropriate voltage source V_s and resistance R .

