

# Homework #2

MEMS 0031 - Electrical Circuits

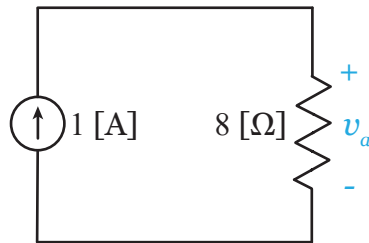
Assigned January 21<sup>st</sup>, 2019

Due January 25<sup>th</sup>, 2019

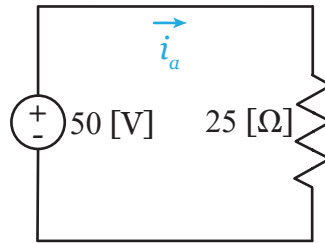
## Problem #1

- In the circuits shown below, (a)-(e), determine:
  - a) The unknown value(s) of  $i$  and/or  $v$ .
  - b) The power dissipated by each resistor.
- For the circuit shown in (f), develop a system of equations that would allow you to determine the current in each element, and solve for the current  $i_a$  symbolically in terms of all other circuit variables.

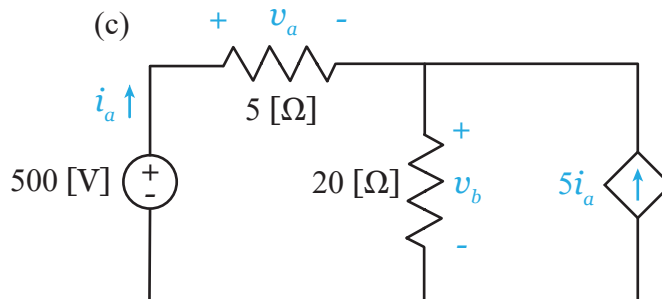
(a)



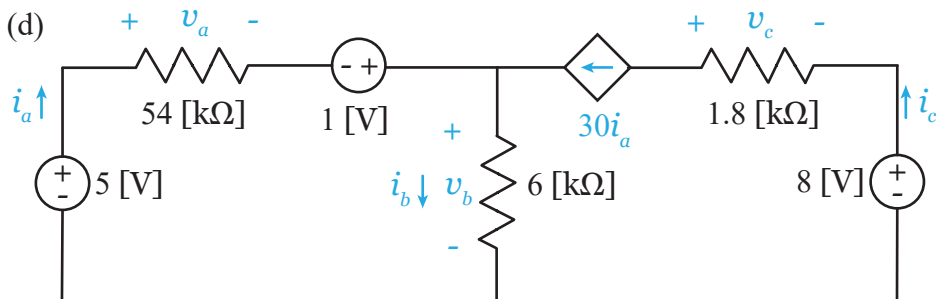
(b)



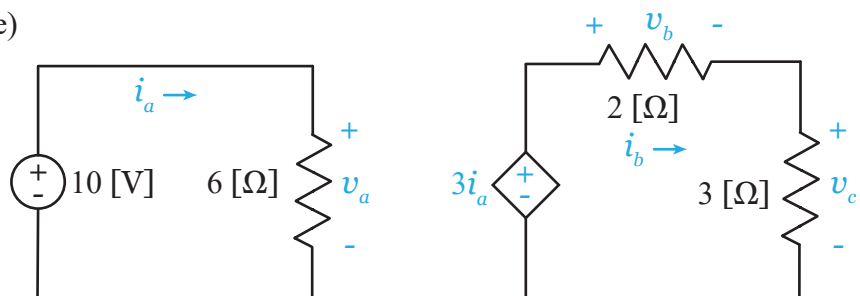
(c)



(d)



(e)



(f)

