

ECE 35, Spring 2020

Quiz 2

/ 10

Last name

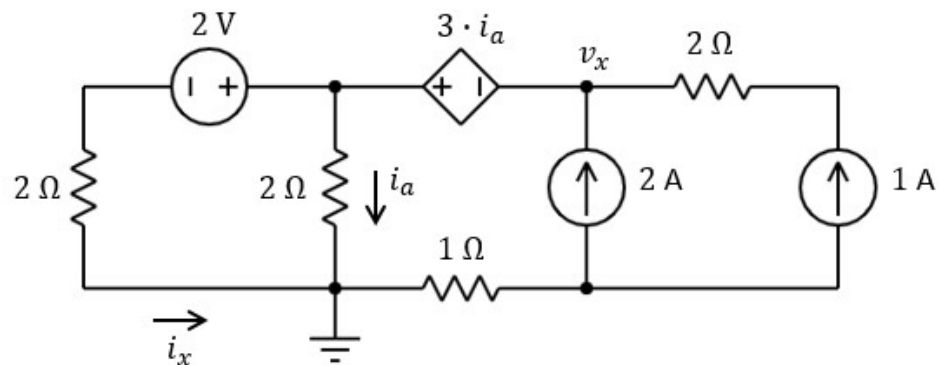
First + middle
name(s)

PID

(1) (5 points)

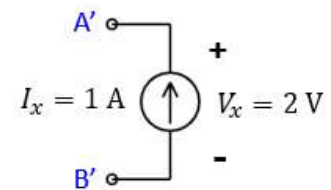
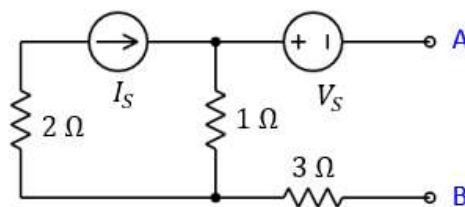
Consider the circuit below. You must use mesh analysis.

- (a) Find i_x .
(b) Find the node voltage v_x .



(2) (5 points)

- (a) Consider the circuit below on the left. **Find the Thevenin model for the circuit between A and B.** You are not given the values of I_S and V_S . However, you are told that if you connect current source I_x to the circuit (A' connected to A and B' connected to B) the voltage V_x appears across the current source.



- (b) Now connect the circuit on the right to the original one (A'' connected to A and B'' connected to B). **Find R_L such that the power received by R_L is maximized.**

