

GEORGIA INSTITUTE OF TECHNOLOGY
School of Electrical and Computer Engineering

ECE 2040
Circuit Analysis

Quiz #2

Friday, February 25, 2000

Name: _____

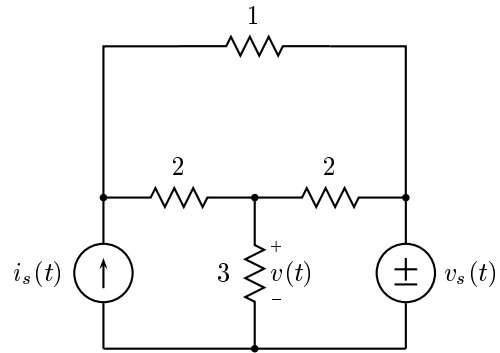
GENERAL INSTRUCTIONS

1. This is a *closed book, closed notes* exam. You may use one 8.5 inch \times 11 inch sheet of handwritten notes and a calculator.
2. Please do all of your work on the exam itself. You may use the backs of the pages, if necessary.
3. Please be as neat and well organized as possible.
4. Clearly indicate your answers.

<i>Problem</i>	<i>Max</i>	<i>Score</i>
1	25	
2	25	
3	25	
4	25	
Total	100	

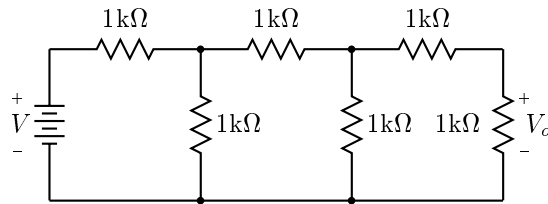
Problem Q2.1:

Solve for the voltage $v(t)$ using the mesh method.



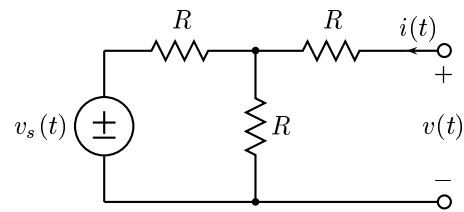
Problem Q2.2:

For the circuit below the source voltage on the left is a battery (i.e., a constant voltage source).



Determine the value of V required to produce a value for V_o of 1 volt.

Problem Q2.3:



- (a) Find the Thévenin equivalent network corresponding to the above two-terminal circuit.
- (b) Find the Norton equivalent network.

Problem Q2.4:

Determine $v_{out}(t)$ in terms of $v_{in}(t)$.

