

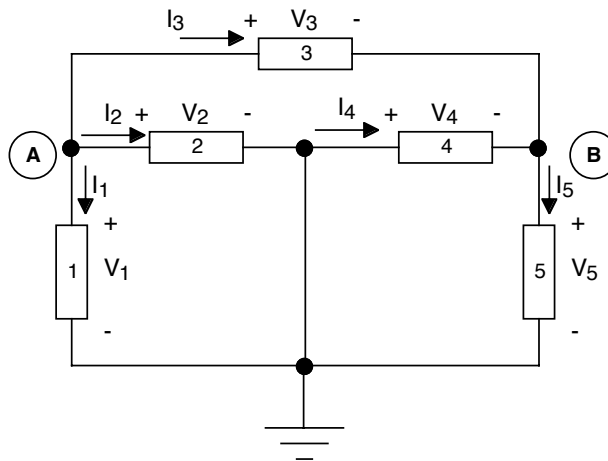
CASE WESTERN RESERVE UNIVERSITY
 Case School of Engineering
 Department of Electrical Engineering and Computer Science
ENGR 210. Introduction to Circuits and Instruments (4)

Quiz No. 2

1/30/04

PUT ANSWERS IN THE SPACE PROVIDED AND SHOW YOUR WORK IF APPROPRIATE
STATE ALL ASSUMPTIONS

Problem 1 (10 points) Consider the circuit shown below.



(a) Write the specified loop equations using KVL

Loop	Equation
2,3,4	
1,2	
4,5	

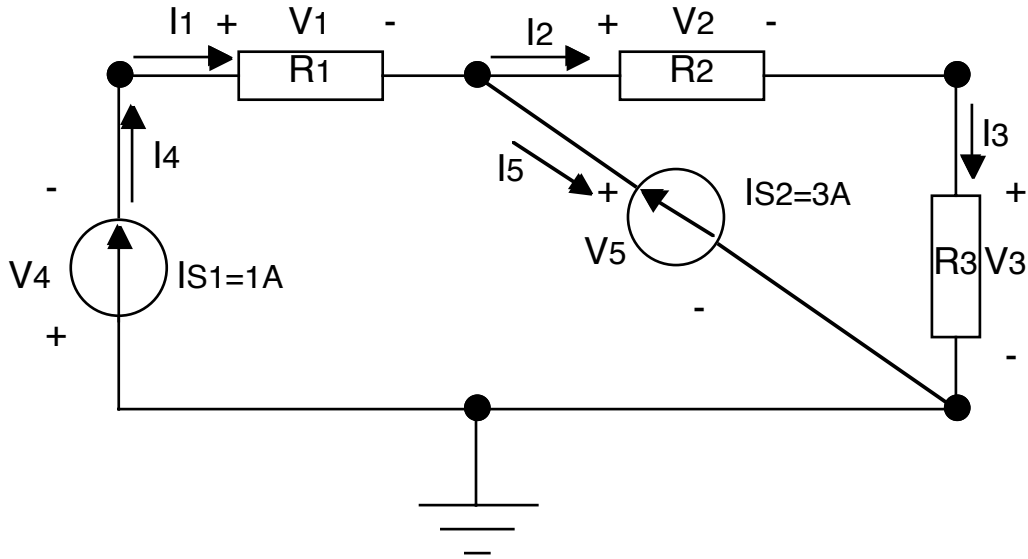
(b) How many nodes are there in this circuit?

(c) The following statement is: TRUE FALSE Circle the correct response.

The ground symbol shown means that this circuit is actually connected to a wire which goes into the earth's ground.

Problem 2 (10 points)

Use connection equations and element constraints to find the voltage across each element and the current through each element. Numeric answers are required. Use the element values $R_1=6$ ohms, $R_2=3$ ohms, $R_3=2$ ohms, $I_{S1}=1$ ampere, and $I_{S2}=3$ amperes.



Element	Voltage	Current
1		
2		
3		
4		
5		