LAM

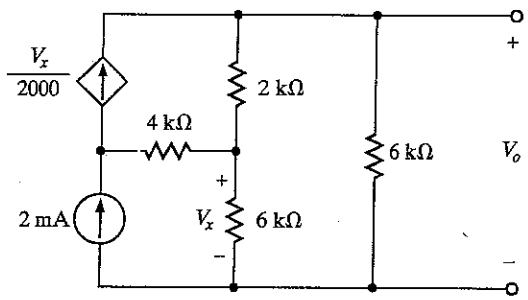
ENGINEERING 11
ELECTRICAL CIRCUIT ANALYSIS

9.23.04
page 1/2

EXAM 1

Each problem is worth 25 points.

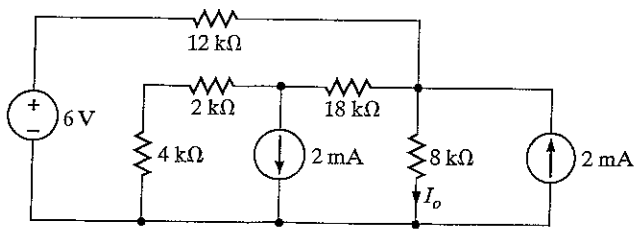
1. Find V_0 in the circuit shown below.



2. Consider the 8 kΩ resistor in the circuit below to be the load resistor.

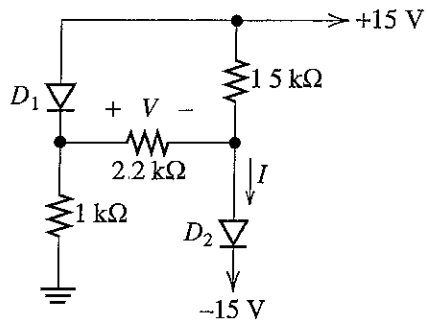
a. Find the Thevenin equivalent of the remainder of the circuit (after removing the 8 kΩ resistor). You may use any combination of methods you like to find the Thevenin equivalent.

b. Find the current I_0 and the power dissipated by the resistor.



EXAM 1

3. Find I and V in the circuit shown below.



4. Find i_0 in the circuit shown below. The load can be considered to be a resistor connected to ground, and in this circuit, it does not matter what value that resistor has.