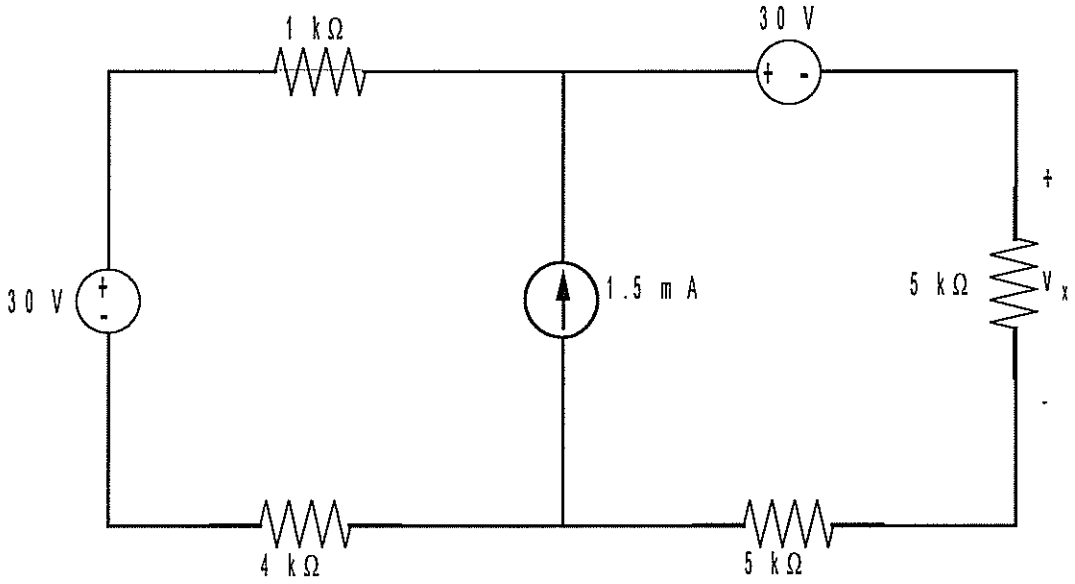
Last Name, First Name *Student No.*

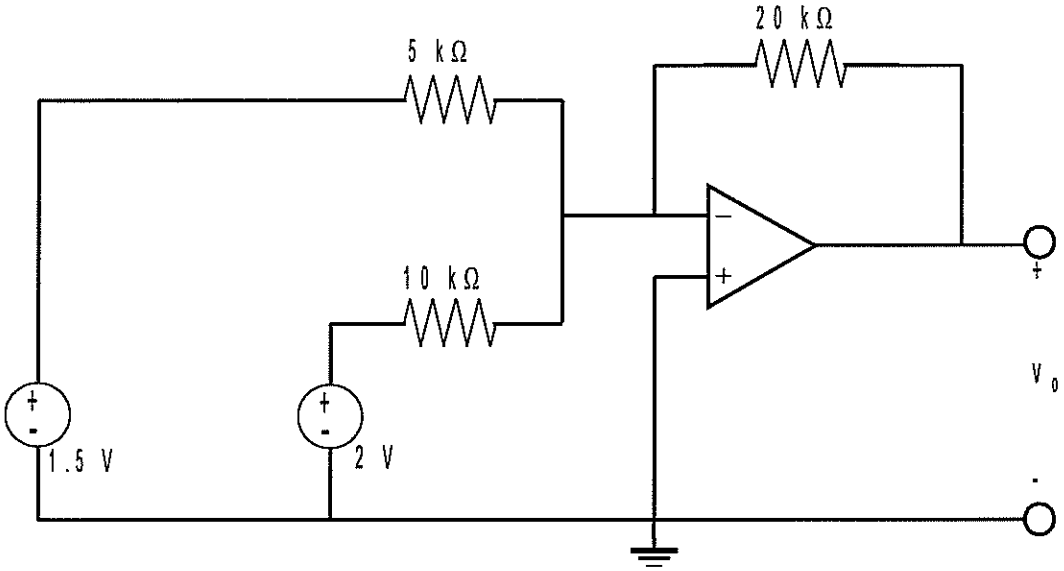
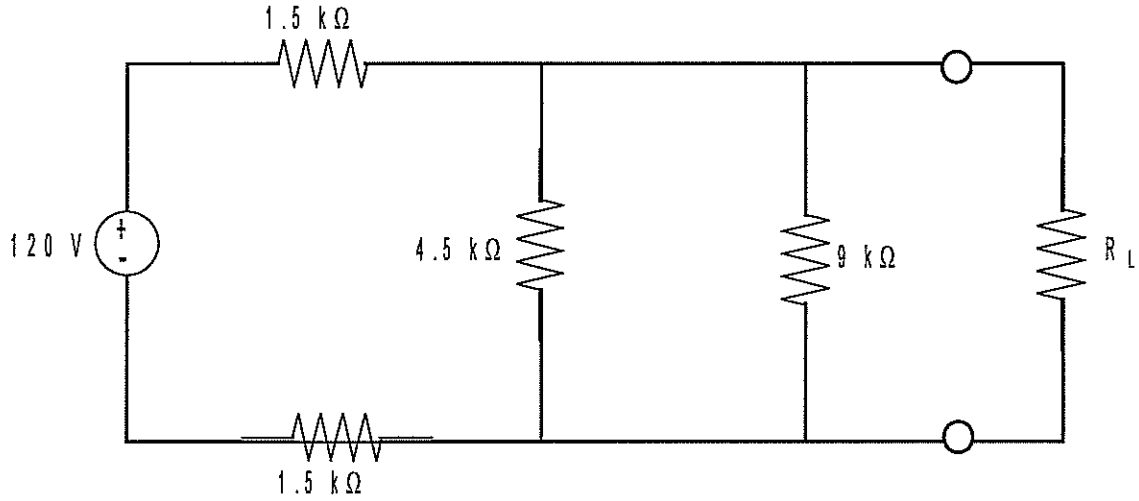
University of Toronto
Department of Electrical & Computer Engineering
ECE110S – Electrical Fundamentals
Quiz 3 – March 9, 2005, 4:30-5:00 PM

Instructions: Non-programmable calculators allowed. No other aids. Answer in the space provided on these sheets. The back sides of these sheets can be used as well. For full marks you must show methods, state UNITS and compute numerical answers when requested. **Please write in PEN, not pencil.**

1. Use superposition OR mesh analysis to find the voltage v_x in the circuit below. **(7 marks)**



2. Find the output voltage v_o in the OP-AMP circuit below. **(5 marks)**



3. Find R_L for maximum power transfer and the maximum power that can be transferred to the load in the circuit below. **(8 marks)**