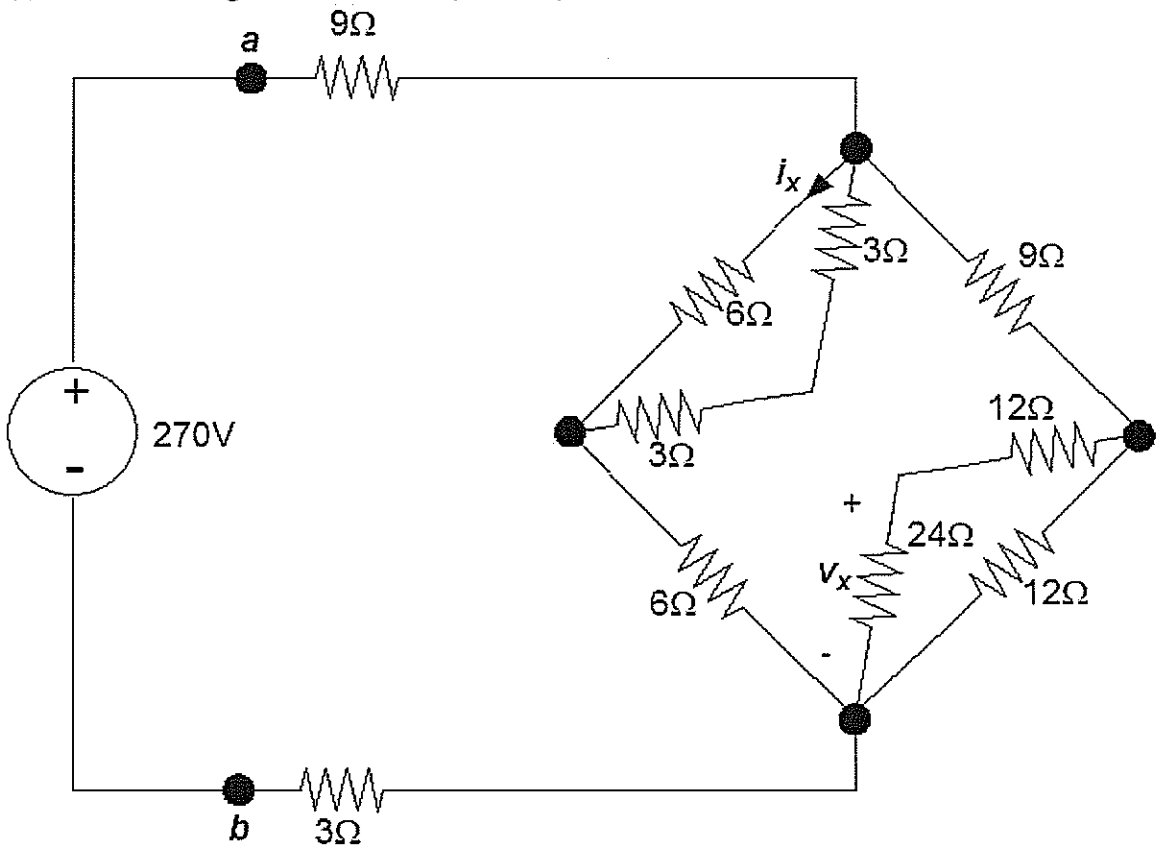
Last Name, First Name *Student No.*

University of Toronto
Department of Electrical & Computer Engineering
ECE110S – Electrical Fundamentals
Quiz 2 – February 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.** ***Quizzes written in pencil will not be considered for mark revision.***

1. In the circuit below calculate the following:
(a) The equivalent resistance R_{eq} between points a and b. **(2 marks)**
(b) Voltage v_x using voltage division. **(4 marks)**
(c) Current i_x using current division. **(4 marks)**



2. Use Nodal Analysis for the circuit below.

(a) Find voltage v_x and current i_x. **(8 marks)**

(b) Determine if the 40V source delivers or absorbs power. **(2 marks)**