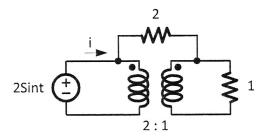
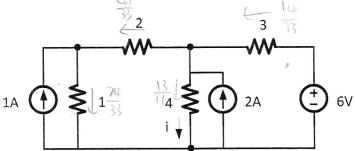
Total of 3 questions, 100 minutes.

1. In the following circuit, the transformer is ideal. Find the current i (30 points).



2. Find the current *i* in the circuit below by a) node analysis, b) superposition (40 points).



3. In the circuit below, inductor L_1 has an initial current of I_0 and the circuit has been idle for a long time. The switch is closed at t = 0. Plot and find the resistor voltage. What is the final current of the inductors at $t = \infty$ (40 points).

