

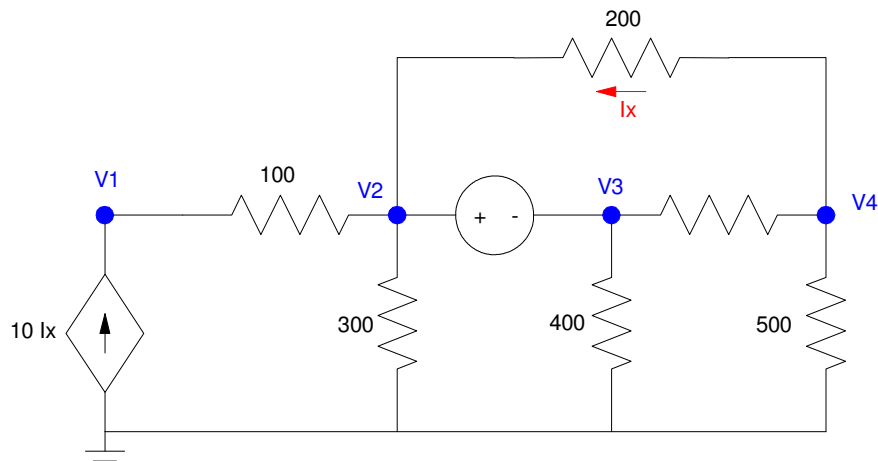
EE 206: Homework #4

Super Nodes, Current Loops. Due Monday, September 21st

Please make the subject "EE 206 HW#4" if submitting homework electronically to lauren.n.singelmann@ndsu.edu (or on blackboard)

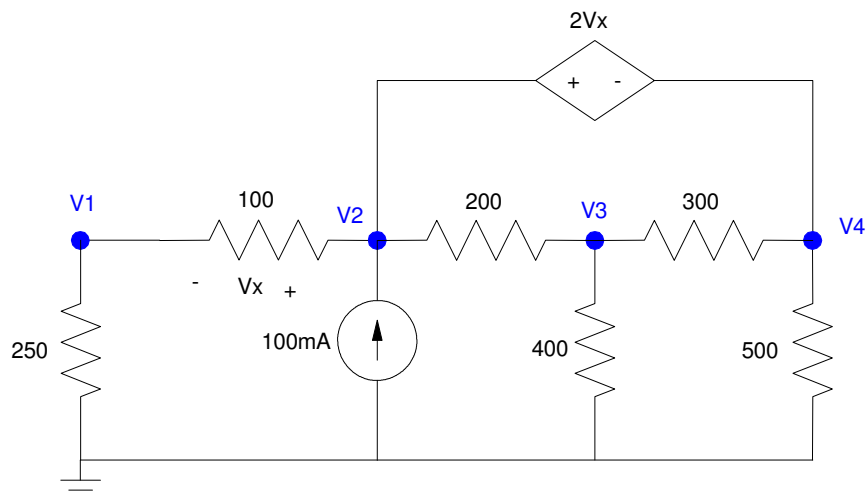
Super Nodes

- 1) Write the voltage node equations for the following circuit (N equations for N unknowns)
- 2) Solve for V_1 , V_2 , and V_3



Problem 1 & 2

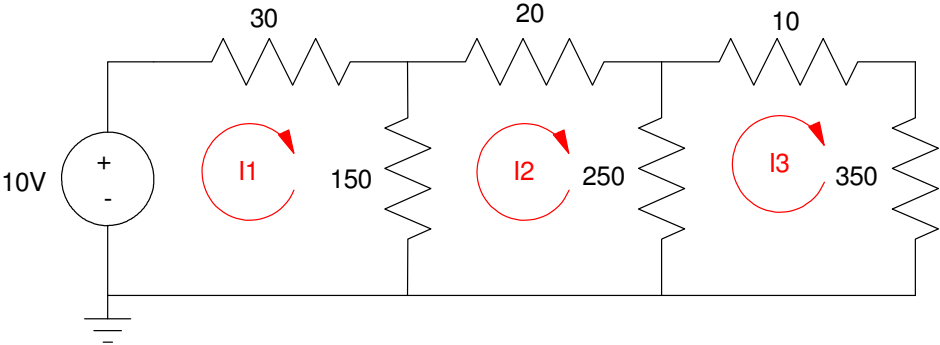
- 3) Write the voltage node equations for the following circuit (N equations for N unknowns)
- 4) Solve for V_0 , V_1 , V_2 , and V_3



Problem 3 & 4

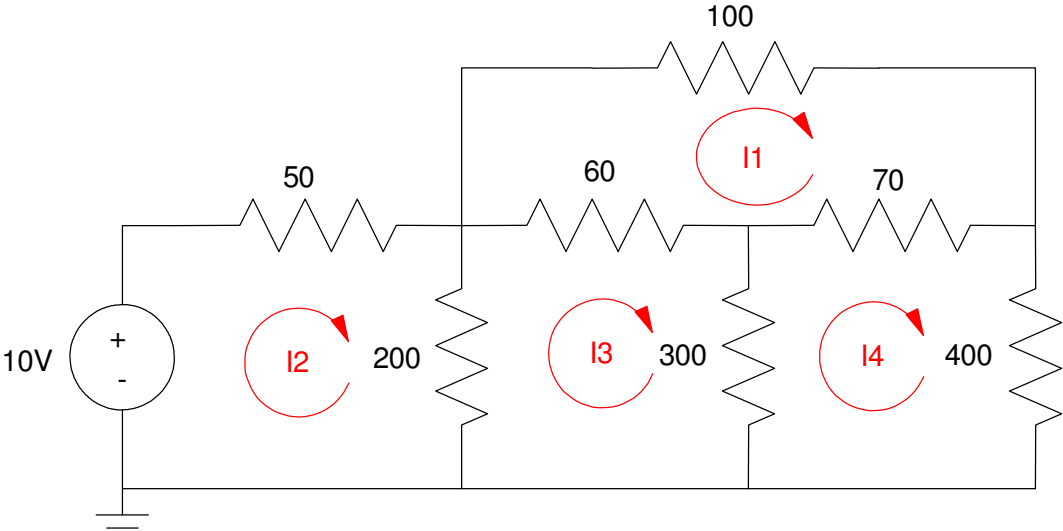
Current Loops

- 5) Write the current loop equations for the following circuit (N equations for N unknowns).
- 6) Solve for I1, I2, and I3



Problem #5 & #6

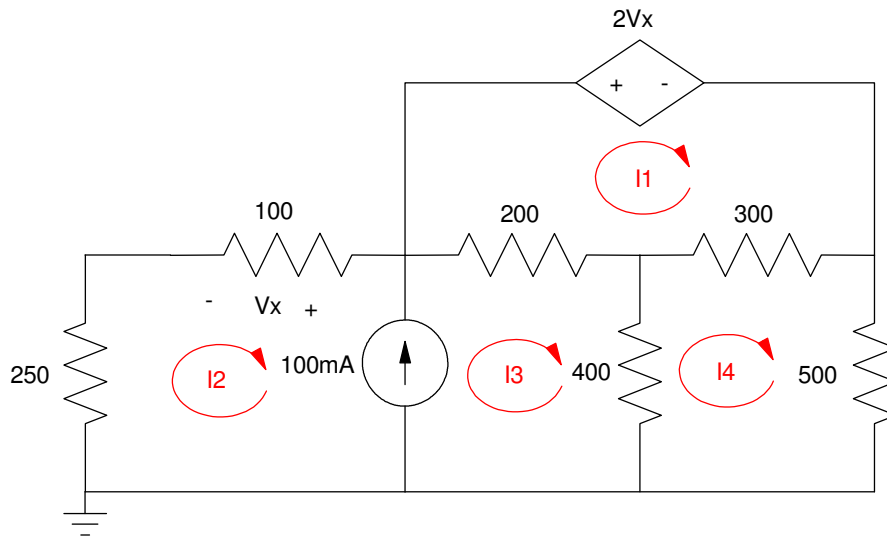
- 7) Write the current loop equations for the following circuit
 - (no need to solve - just write N equations for N unknowns)



Problem #7

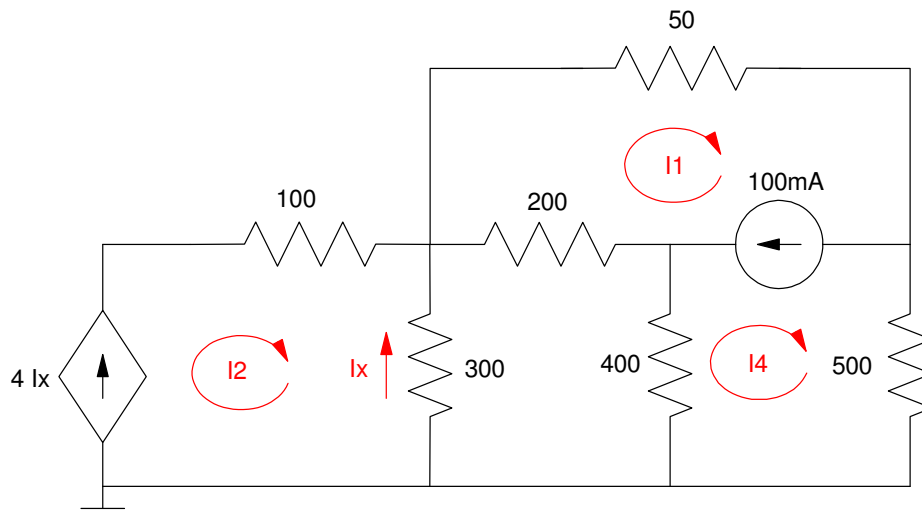
Super Loops

- 8) Write the current loop equations for the following circuit
- (no need to solve - just write N equations for N unknowns)



Problem #8

- 9) Write the current loop equations for the following circuit
- (no need to solve - just write N equations for N unknowns)



Problem #9