## Electric Circuits

Homework Set 6

1. Solve for $V_{1}$ in the following circuit using nodal analysis.

2. Using nodal analysis, find $v_{o}$ in the circuit below.

3. Find $I_{0}$ in the following circuit using the node-voltage method.

4. Find $V_{o}$ in the following circuit using the node-voltage method.

5. Using nodal analysis, find $v_{o}$ in the circuit below.

6. Determine the node voltages in the following circuit using nodal analysis.

7. Using the node-voltage method, find $v_{1}, v_{2}$ and $v_{3}$ in the circuit below.

8. Using the node-voltage method, find $v_{1}$ and $v_{2}$ in the following circuit.

9. Find $V_{o}$ in the following circuit using the node-voltage method.

10. Using the node-voltage method, find $v_{1}, v_{2}$ and $v_{3}$ in the circuit below.

11. Use nodal analysis to determine the voltages at nodes $a, b, c$, and $d$ in the following circuit.

12. Use nodal analysis to find $v_{o}$ and $i_{o}$ in the circuit below.

13. Using the node-voltage method, find $v_{1}, v_{2}$ and $v_{3}$ in the circuit below.

