Problem 1) Use node analysis to find the output voltage $V_0$ and the power in the 6 mA source.

Problem 2) Find the controlling voltage $V_X$ and the output voltage $V_0$ in the circuit shown using node analysis.

Problem 3) Find the current $I_0$ in the circuit shown using node analysis and the power absorbed or supplied by the 12 V source.
Problem 4) Find the controlling current $I_X$ and determine the voltage $V_0$ in the circuit using node analysis.

Problem 5) Use loop analysis to determine the current $I_0$.

Problem 6) Find $I_0$ and the power in the voltage source using loop analysis.

Problem 7) Find the controlling current $I_x$ and the voltage $V_1$ in the circuit shown.
Problem 8) Find the current $I_0$ in the circuit using loop analysis.

Problem 9) Use loop analysis to find the voltage $V_0$ across the 3 kΩ resistor.

Problem 10) Find the current $I_0$ and the power in the 3 mA current source. Verify your answer by solving again using node analysis.