Problem 1

Find the output of the circuits below

Ckt 1

Find $\frac{v_o}{v_{in}}(j\omega)$

Ckt 2

Find $\frac{v_o}{v_{in}}$

Check your answer with SPICE.
Problem 2

Design a Schmitt trigger to implement the hysteresis curve below. Simulate your circuit on SPICE and plot the hysteresis curve.

Note: Available supplies are ±15V. For simulation use an LF411. You must create your own zener model.
Problem 3

Plot $V_0(t)$, $V_1(t)$, $V_2(t)$, and $V_3(t)$

What is the name of this circuit?

Problem 4

Find $V_o/V_{in}$. Check your answer with PSpice.