

Special Problem 4.6-3

The inductor and capacitors in the circuit below are **unfathomably large**.

I have completed the **DC analysis** (so you **don't** have to)—I determined that $V_{GS} = 4.0 \text{ V}$, and **CHECKED** that the MOSFET is in **saturation**.

1. Now you determine and **carefully draw** the simplified **small-signal circuit** (be complete, clear, and precise!).
2. Now analyze your small-signal circuit and determine the **small-signal voltage gain** ($A_v = v_o/v_i$) of the **amplifier** below.

