HW #4

1) **Textbook problems** 3.31(a,c); 3.47, 6.7, 6.13.
2) **Phone Charger design:** You are given the wall plug supply of $110V_{rms}$ at 60Hz.
    a. Using hand-calculations design a full-wave rectifier circuit (with regulator) to deliver 2W at 5VDC to a cellphone with a ripple of 100mV. You can use a transformer with any turn ratio, 1N4002 diodes, and a Zener diode with V_z=5V.
    b. Simulate the circuit using Cadence and clearly demonstrate your results with well labeled plots.