EE 230 — HW 3.22 Name_____

(a) Design a non-linear oscillator circuit that provides two outputs: a square wave that oscillates between +10 V and -10 V and triangle wave that oscillates between +5 V and –5 V. The oscillation frequency should be 4 kHz.

You can assume that you have op amps available that provide outputs that saturate at ±10 V. Be sure to specify all other components used in your design.

(b) Confirm your design by simulating it in SPICE. As seen before, to the get the expected operation with the 741 op-amp in PSPICE, you will need to adjust the power supply values somewhat in order to have saturation limits at ±10 V. Make a plot of the two outputs together in the same graph. Show at least 3 periods of oscillation.