

Homework 5
EE 220 Circuits I Fall 2019
Monday, October 7, 2019

- 1) PP5.1 Modification: Reverse polarity of op-amp inputs.
- 2) PP5.8
- 3) 5.8 Also, determine the current i_{out} coming out of the output of the op-amp (i.e., the pointy end).
- 4) 5.21 Also, determine the current i_{out} coming out of the output of the op-amp (i.e., the pointy end).
- 5) 5.29 Also, design a version of the circuit that will output a voltage of 12 V when the input is 2 V while limiting the **magnitude** of the current i_{out} from the output terminal of the op-amp to the range of $17 \text{ mA} < |i_{\text{out}}| < 24 \text{ mA}$ when a 750Ω load is attached to the output terminals. Draw your completed circuit design. Then, determine i_{out} , i_L , and v_o when $v_i = 1.5 \text{ V}$. Use standard resistor values that are integer multiples of $1 \text{ k}\Omega$ (see spools and boards in lab).
- 6) 5.37
- 7) 5.48
- 8) 5.66

Due Friday, October 11, 2019.