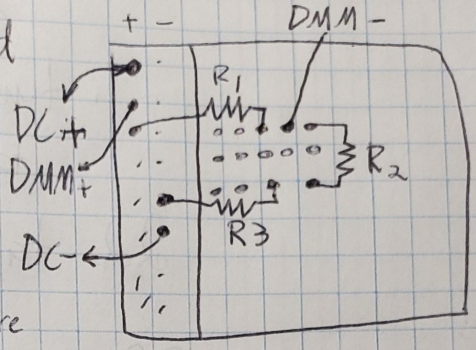
ECE 401 Oct. 16 CNF

Lab #3

1. Plug correct wires and resistors into DMM, Power Supply, and bread board



2. record voltage drop
   $V_{R_1} = 4.966V$
3. Change DMM lead placement to measure V_{R_2}
4. record voltage drop
   $V_{R_2} = 5.1V$
5. Change DMM lead placement to measure V_{R_3}
6. record voltage drop $V_{R_3} = 4.96V$
7. ~~Lower input voltage~~ to change resistances to 10K, 20K, 30K
8. ~~Repeat~~ Measure $V_{R_1}, V_{R_2}, V_{R_3}$ again
9. record $V_{R_1} = 2.494$ $V_{R_2} = 5.008$ $V_{R_3} = 7.467V$
10. raise voltage to 20V DC, record $V_{R_1} = 3.328$
    $V_{R_2} = 6.681V$
    $V_{R_3} = 9.967V$
11. Lower voltage to 7.5 V DC record
    $V_{R_1} = 1.248$ $V_{R_2} = 2.506$ $V_{R_3} = 3.738$
12. change to configuration 2 (parallel)
13. measure voltage drop $V_{R_{1,2,3}} = 14.98$
14. change resistances to 10K, 20K, 30K
15. Measure voltage drop V_R 14.98V
16. add 1MΩ resistor to circuit
17. measure voltage drop 14.97
18. unplug all ~~cord~~ jumpers, leads, and resistors from bread board

19. Turn on function generator and oscilloscope

20. Connect Coaxial to function generator and oscilloscope

21. tune amplitude and frequency to $15V_{ppk}$ and 60 Hz

22. take picture with phone of oscilloscope readout

23. turn off both and disconnect Coaxial cable

$$\% \text{ error} = \frac{\text{Calculated} - \text{measured}}{\text{Calculated}}$$