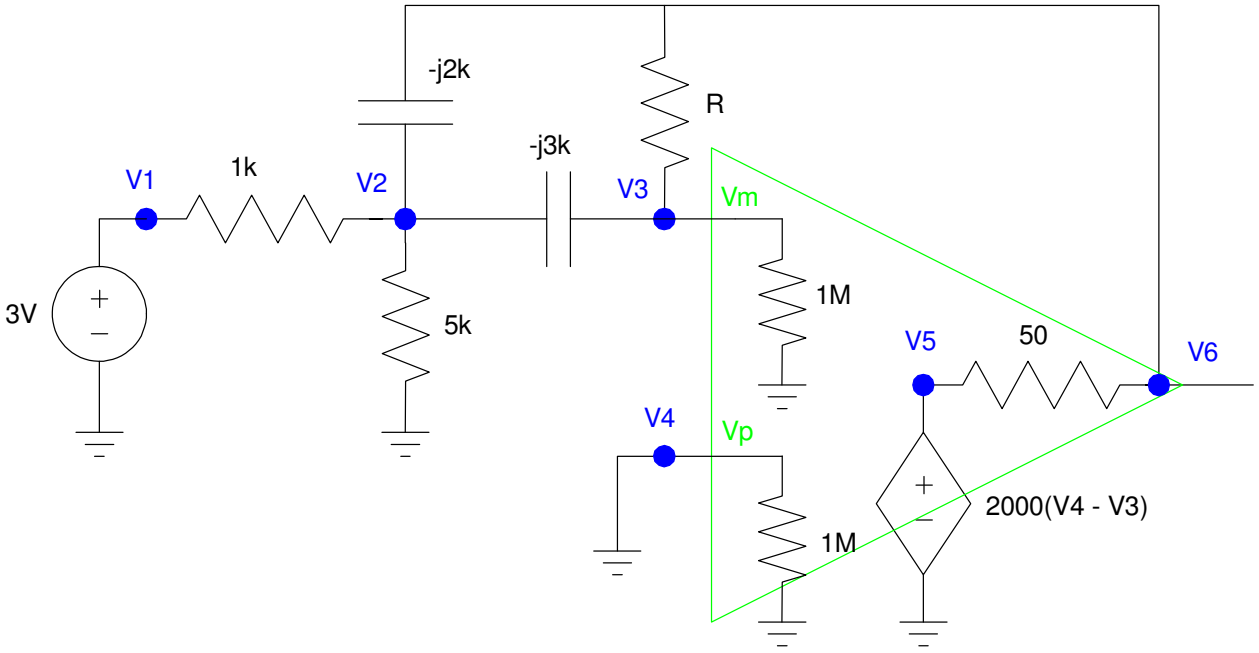
ECE 321 - Quiz #1 - Name _____

Op-Amp Amplifiers & mixers. Due midnight, April 9th
Open-Book. Open Notes. Calculators, Matlab permitted.

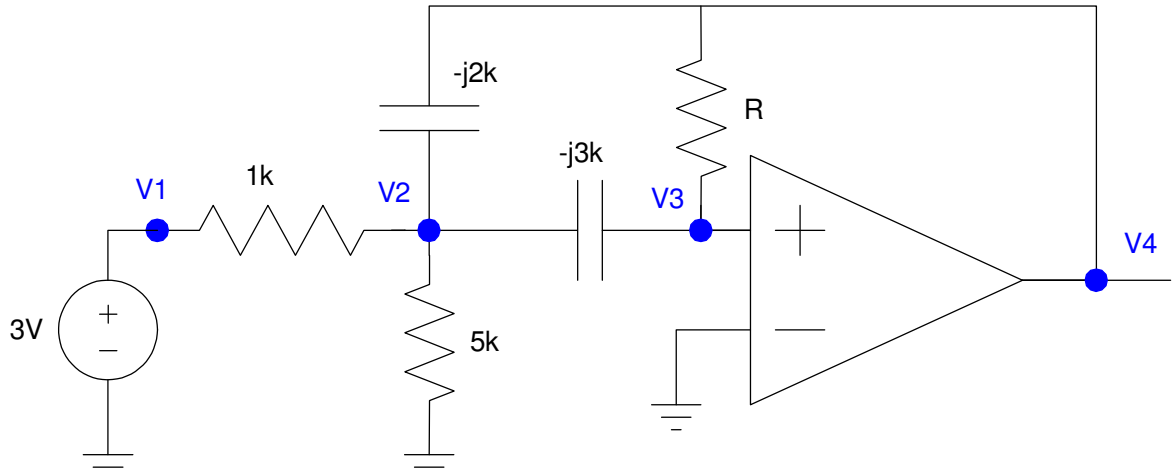
1) Non-Ideal Op Amp: Write the voltage node equations for V1..V5. You don't need to solve

- Assume R = 1000 + 100*(your birth month) + (your birth day). For example, May 14th gives R = 1514.



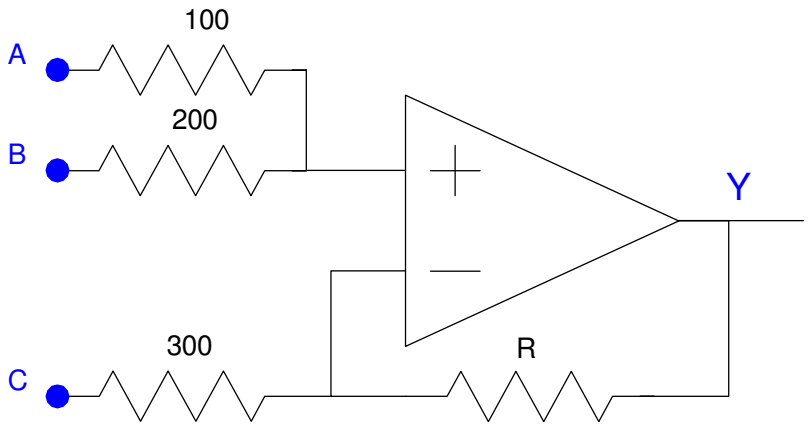
2) Ideal Op-Amp. Give 4 equations which allow you to solve for the four unknown voltages. You do not need to solve.

- Assume ideal op-amps.
- Assume R = 1000 + 100*(your birth month) + (your birth day). For example, May 14th gives R = 1514.



3) Determine Y as a funciton of A, B, and C.

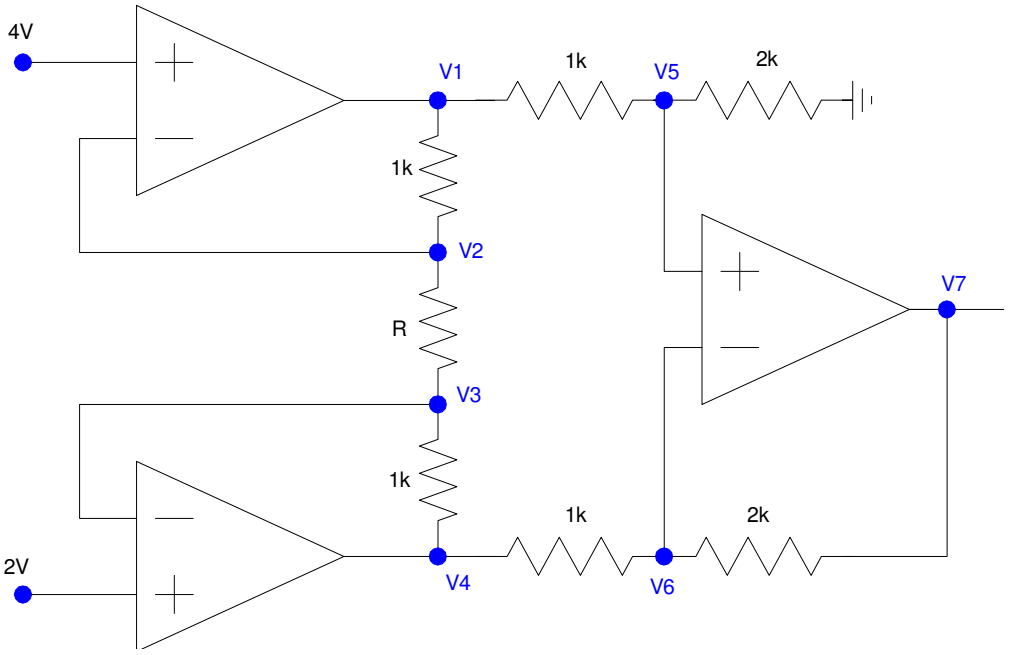
- Assume ideal op-amps
- Assume R = 1000 + 100*(your birth month) + (your birth day). For example, May 14th gives R = 1514.



4) Determine the voltages V1..V7 for the following circuit.

- Assume ideal op-amps.
- Assume R = 1000 + 100*(your birth month) + (your birth day). For example, May 14th gives R = 1514.

V1	V2	V3	V4	V5	V6	V7



5) Design a circuit to implement

$Y = 2X - 4$

6) Design a circuit to implement

$Y = 2A - 3B$