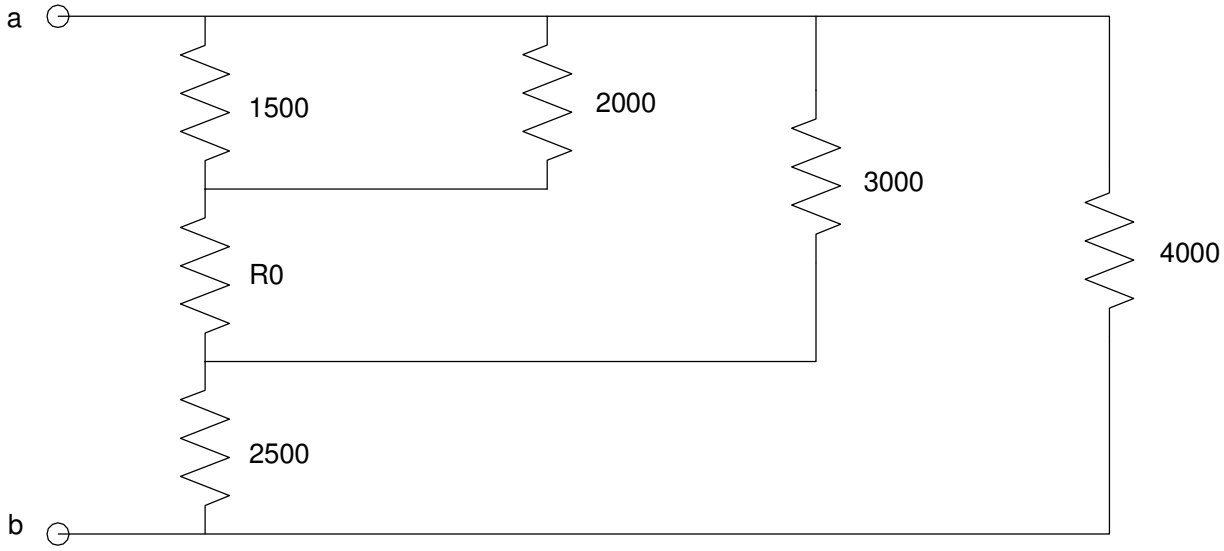
ECE 320 - Quiz #1 - Name _____

EE 206 Review. September 2, 2021

1) Determine the resistance Rab.

- Let R0 be 1000 + 100*(your birth month) + (your birth date).
- For example, May 14th would give R = 1514 Ohms.

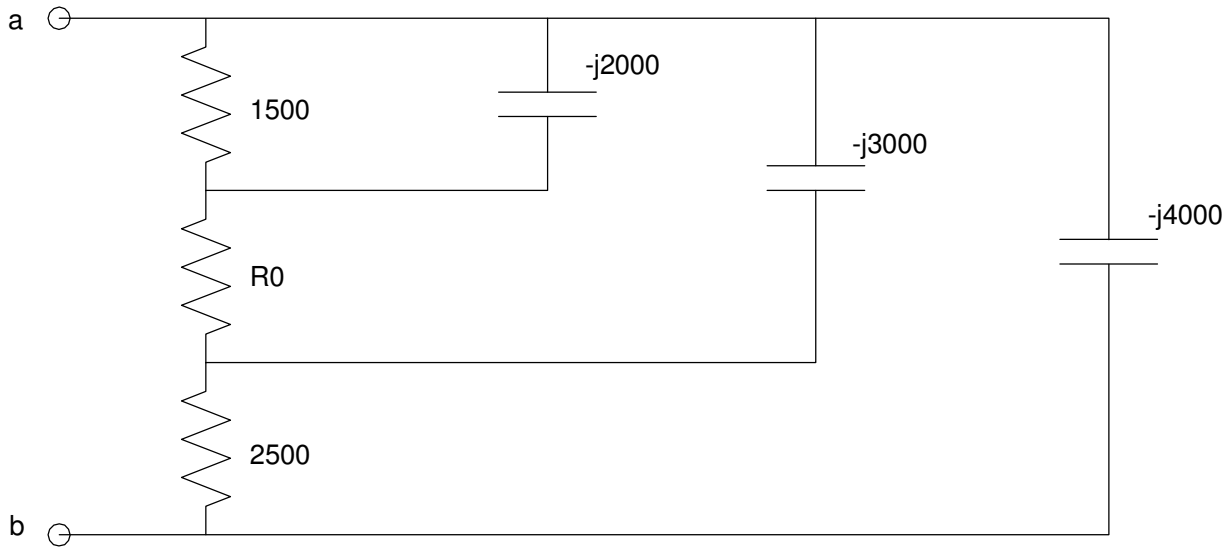
R0 1000 + 100*mo + day	Rab



2) Determine the resistance Rab (note: it will be a complex number)

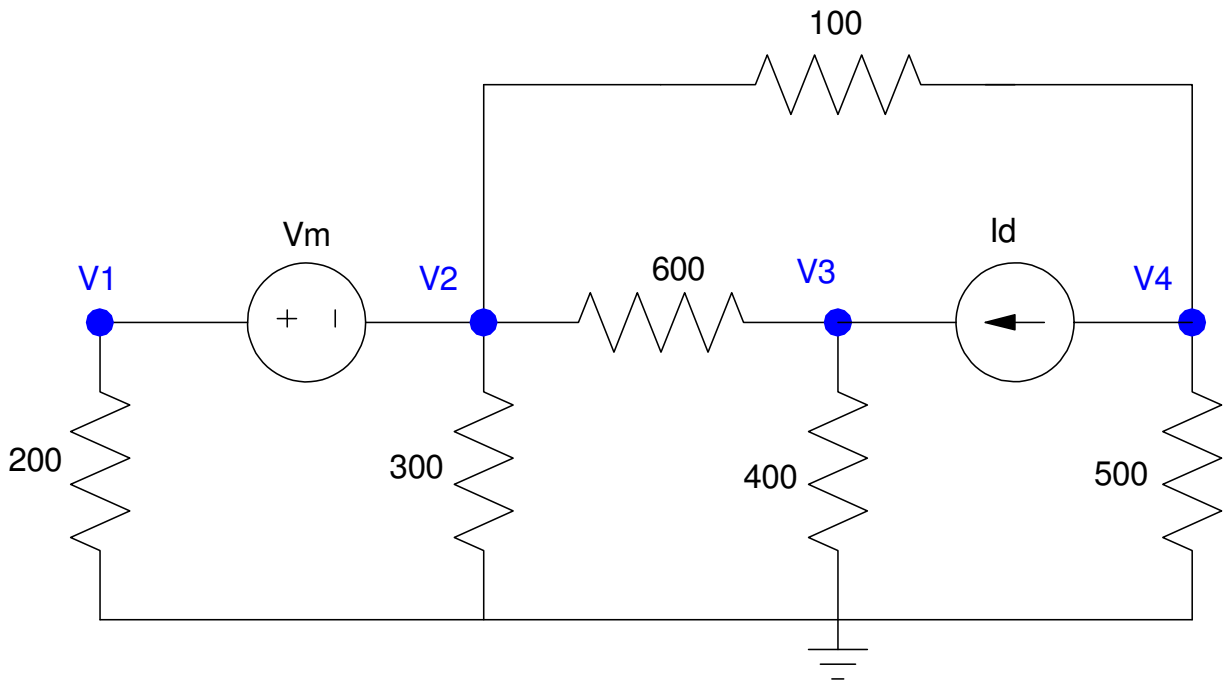
- Let R be 1000 + 100*(your birth month) + (your birth date).
- For example, May 14th would give R = 1514 Ohms.

R0 `1000 + 100*mo + day`	Rab



3) Votlage Nodes: Write the voltage node equations for the following circuit. Assume

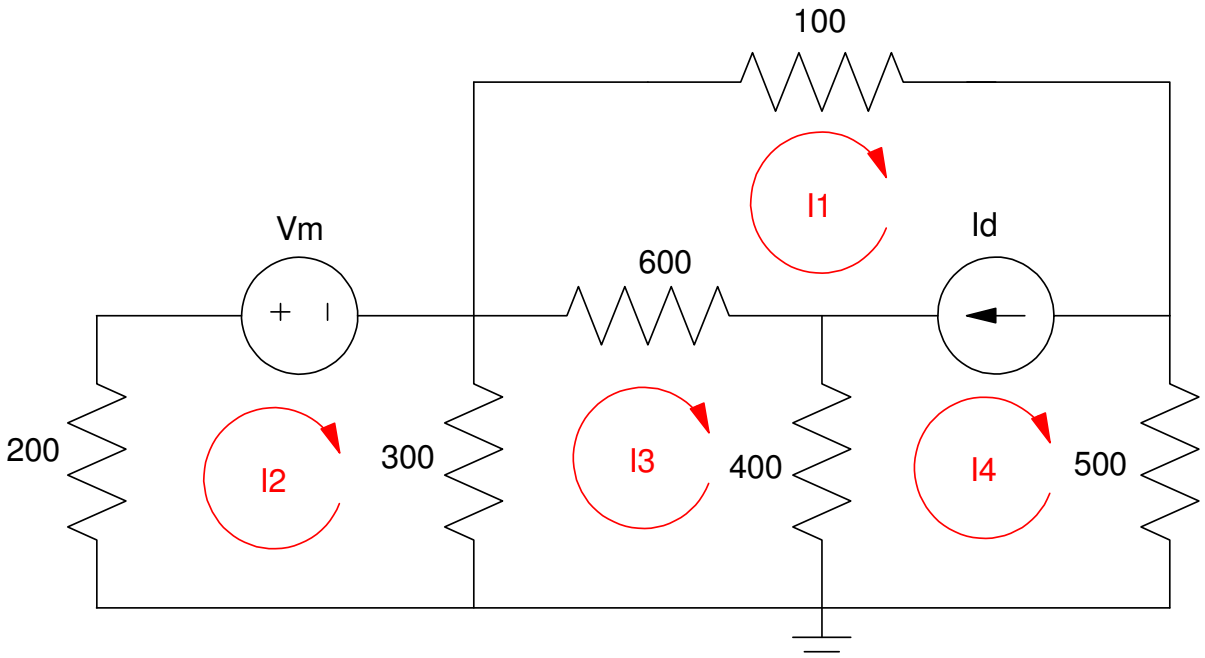
- Vm is your birth month (1..12)
- Id is your birth date (1..31 mA)



Vm (birth month: 1..12)	Id (birth date: 1..31) mA

4) Current Loops: Write the current loop equations for the following circuit. Assume

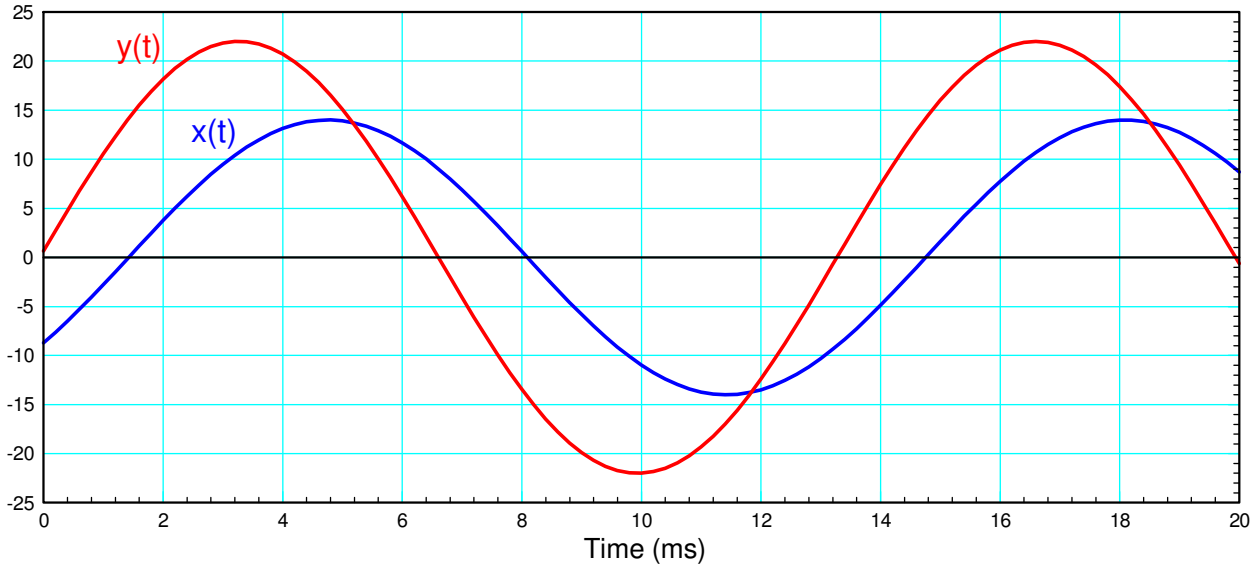
- Vm is your birth month (1..12)
- Id is your birth date (1..31 mA)



Vm (birth month: 1..12)	Id (birth date: 1..31) mA

5) Signals X and Y are displayed on an oscilloscope. Give the phasor representation for these two voltages

Frequency (Hz)	X		Y	
	Amplitude	Phase	Amplitude	Phase



6) Assume R0 is 1000 + 100*(your birth month) + (your birth date).

- For example, May 14th would give R0 = 1514 Ohms

Determine V2(t) assuming

$$V_1(t) = 10 + 8\sin(250t)$$

R0 1000 + 100*(mo) + (day)	V2(t)