

ECE 320 - Quiz #1b - Name _____

EE 206 Review.

Open book, open notes. Calculators permitted. Individual Effort.

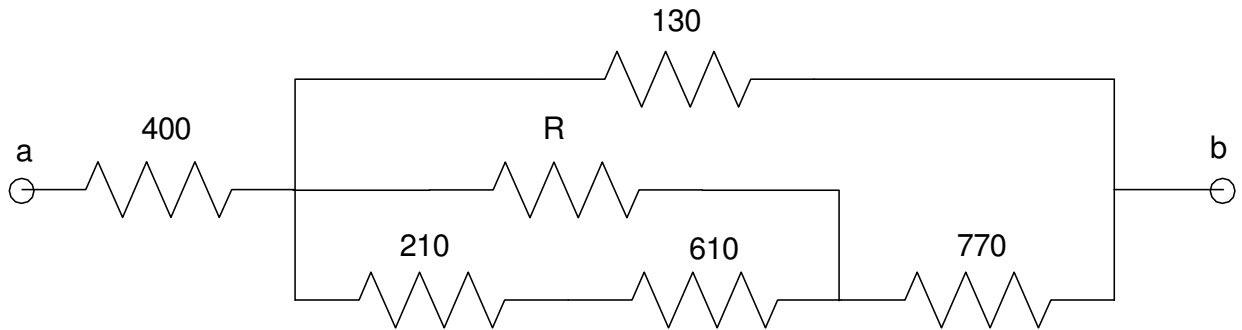
1) Let R be your birthday

$$R = 1000 + (\text{month}) * 100 + (\text{day})$$

For example, May 14th would give $R = 1514$ Ohms

Determine the resistance R_{ab}

R $1000 + 100 * \text{month} + \text{day}$	R_{ab}



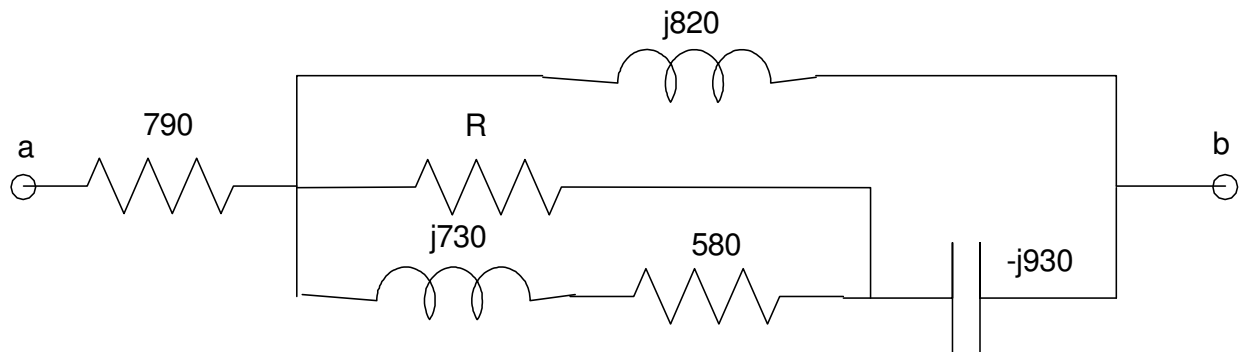
2) Let R be your birthday

$$R = 1000 + (\text{month}) * 100 + (\text{day})$$

For example, May 14th would give $R = 1410$ Ohms

Determine the resistance Z_{ab} (it will be a complex number)

R $1000 + 100 * \text{month} + \text{day}$	Z_{ab}

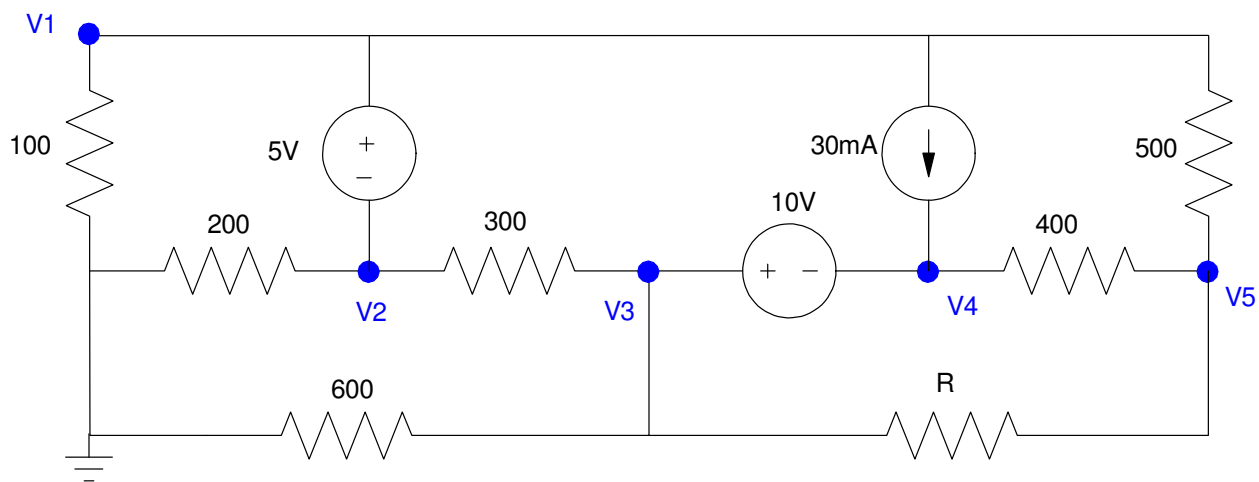


3) Voltage Nodes. Let R be your birthday

$$R = 1000 + (\text{month}) * 100 + (\text{day})$$

For example, May 14th would give $R = 1410$ Ohms

Give 5 equations to solve for the 5 unknown voltages. (you don't need to solve)

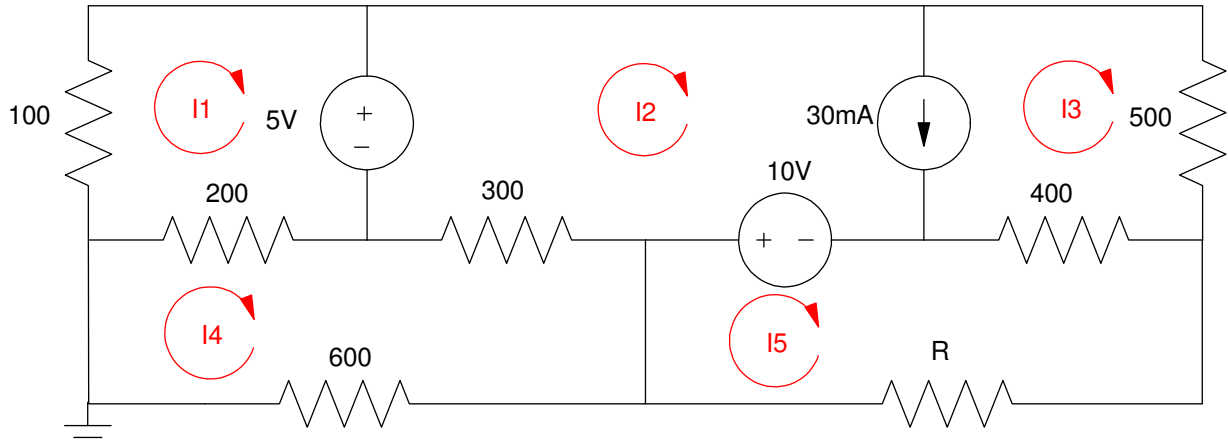


4) Current Loops. Let R be your birthday

$$R = 1000 + (\text{month}) * 100 + (\text{day})$$

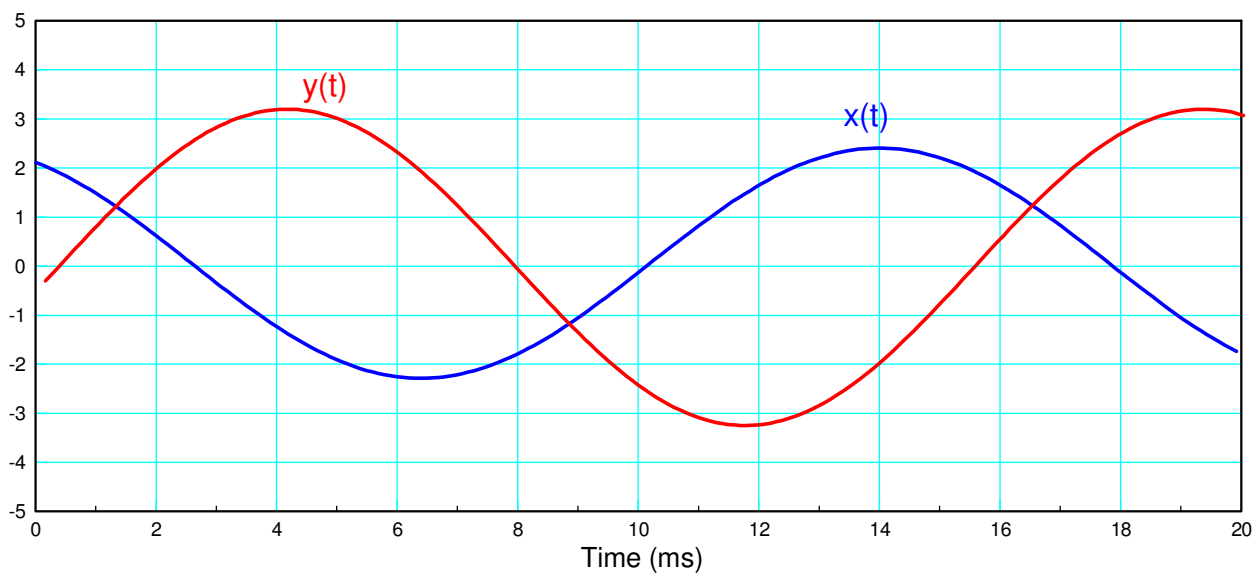
For example, May 14th would give $R = 1514$ Ohms

Give 5 equations to solve for the 5 unknown currents



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) Let R be your birthday

$$R = 1000 + (\text{month}) * 100 + (\text{day})$$

For example, May 14th would give $R = 1410$ Ohms

Determine $V_2(t)$ assuming

$$V_1(t) = 15 + 7 \cos(2000t) + 5 \sin(2000t)$$

R =	
$V_2(t) =$	

