

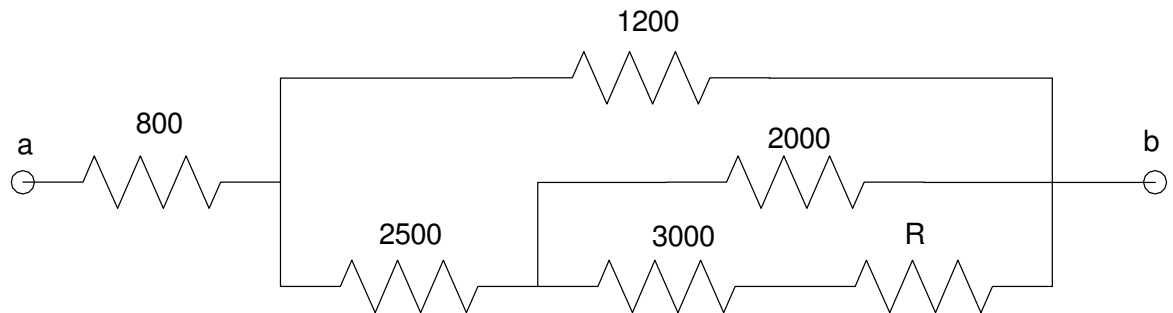
# ECE 320 - Quiz #1 - Name \_\_\_\_\_

EE 206 Review. Friday, January 21st, 2022

1) Determine the resistance  $R_{ab}$ . Assume

- $R = 1200 + 100 * (\text{your birth month}) + (\text{your birth date})$ . For example, May 14th would give  $R = 1714$

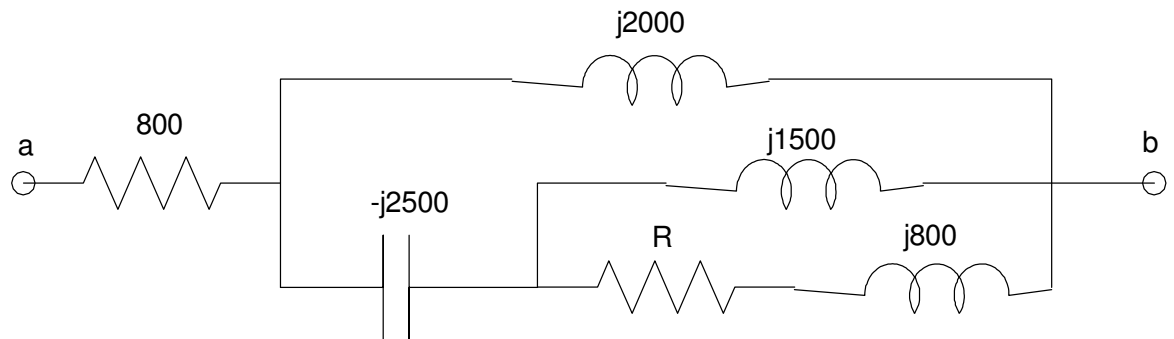
$R$ $1200 + 100 * \text{mo} + \text{day}$	$R_{ab}$



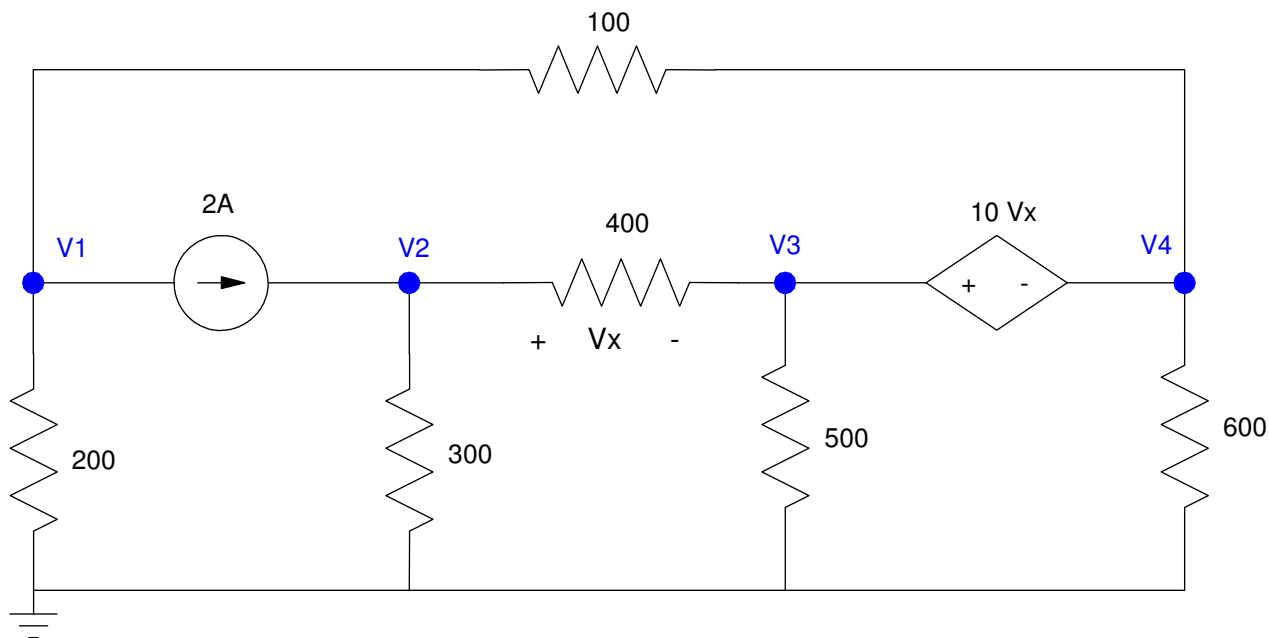
2) Determine the resistance  $Z_{ab}$ . Assume

- $R = 1200 + 100 * (\text{your birth month}) + (\text{your birth date})$ . For example, May 14th would give  $R = 1714$

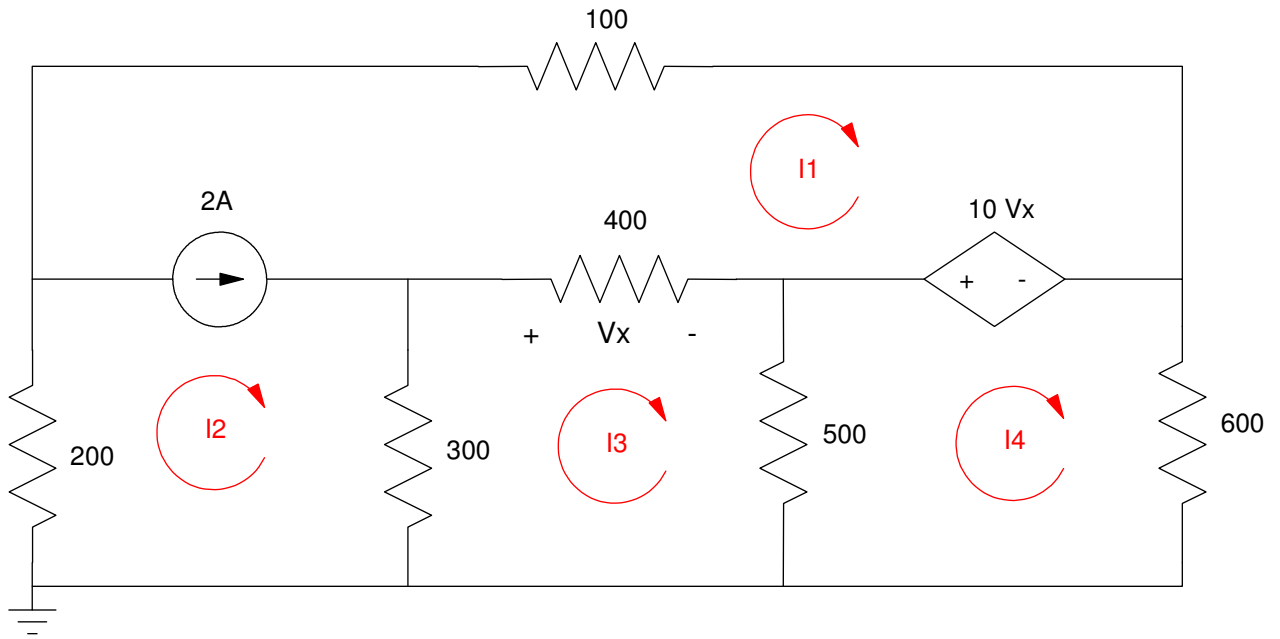
$R$ $1200 + 100 * \text{mo} + \text{day}$	$Z_{ab}$



3) Give N voltage node equations to solve for the N unknown voltages.

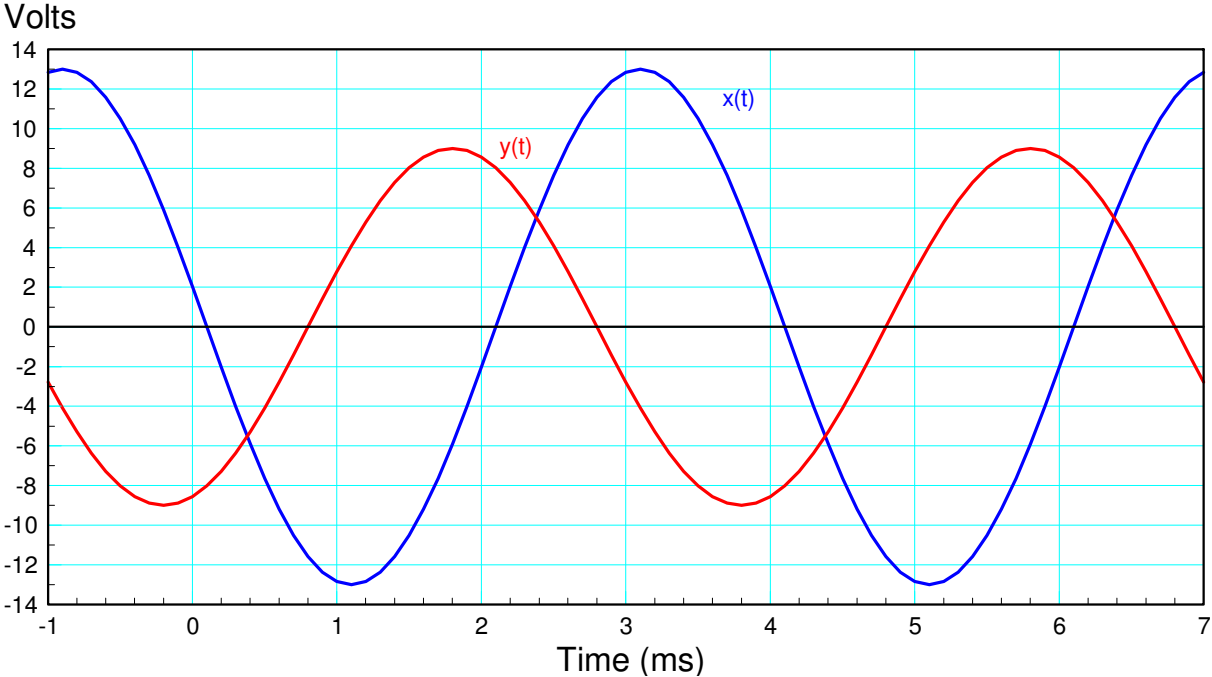



4) Give N current loop equations to solve for the N unknown currents




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) Determine  $y(t)$  assuming

$$x(t) = 20 + 15 \sin(\omega t)$$

$\omega = 1200 + 100 * (\text{your birth month}) + (\text{your birth date})$ . May 14th would result in  $\omega = 1714$  rad/sec

w (rad/sec) 1200 + 100*mo + day	y(t)

