

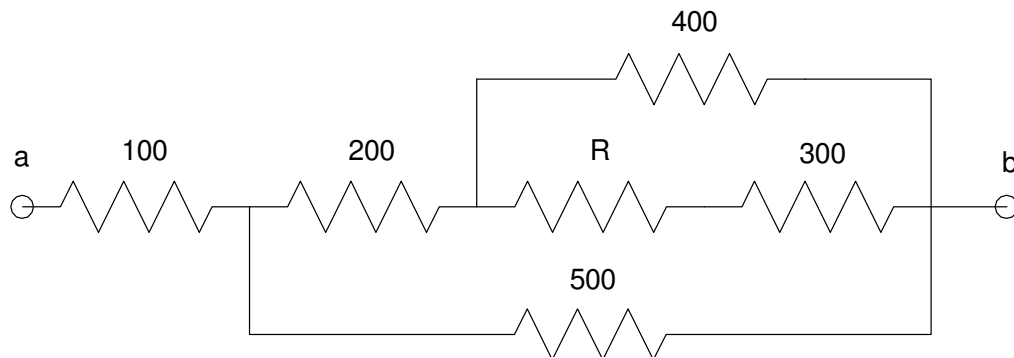
# ECE 320 - Quiz #1 - Name \_\_\_\_\_

EE 206 Review. Spring 2023

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

- $R = 800 + 100 * (\text{your birth month}) + (\text{your birth date})$ . For example, May 14th would give  $R = 1314$

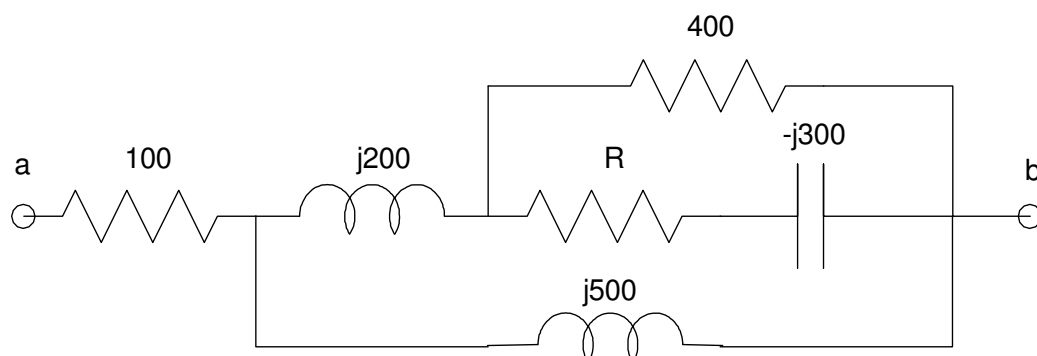
$R$ $800 + 100 * \text{mo} + \text{day}$	$R_{ab}$



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

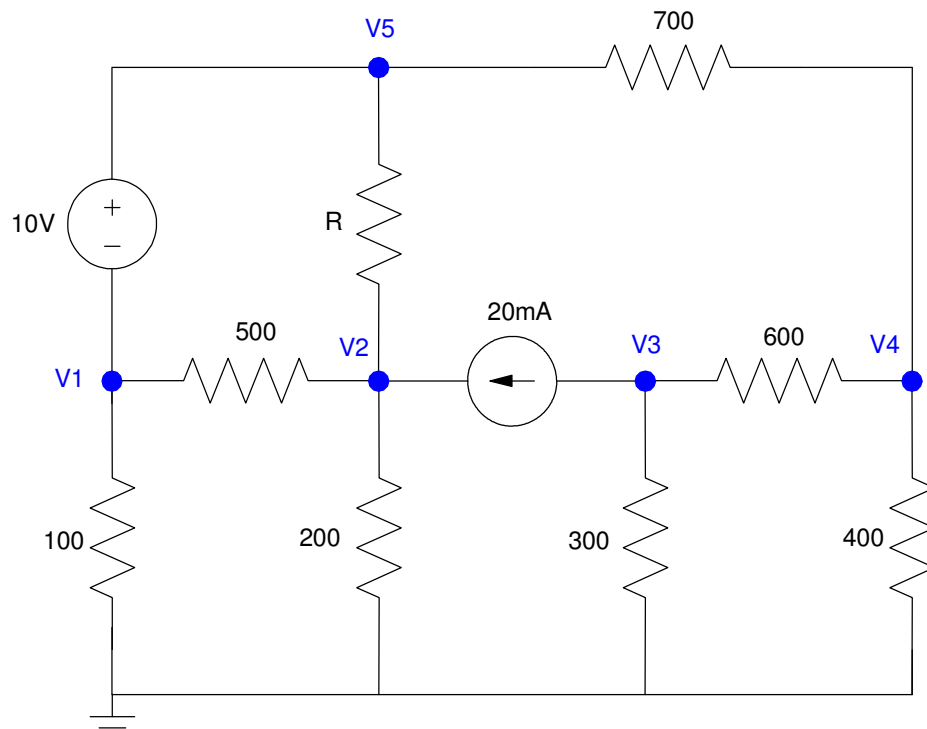
- $R = 800 + 100 \cdot (\text{your birth month}) + (\text{your birth date})$ . For example, May 14th would give  $R = 1314$

$R$ $800 + 100 \cdot \text{mo} + \text{day}$	$Z_{ab}$



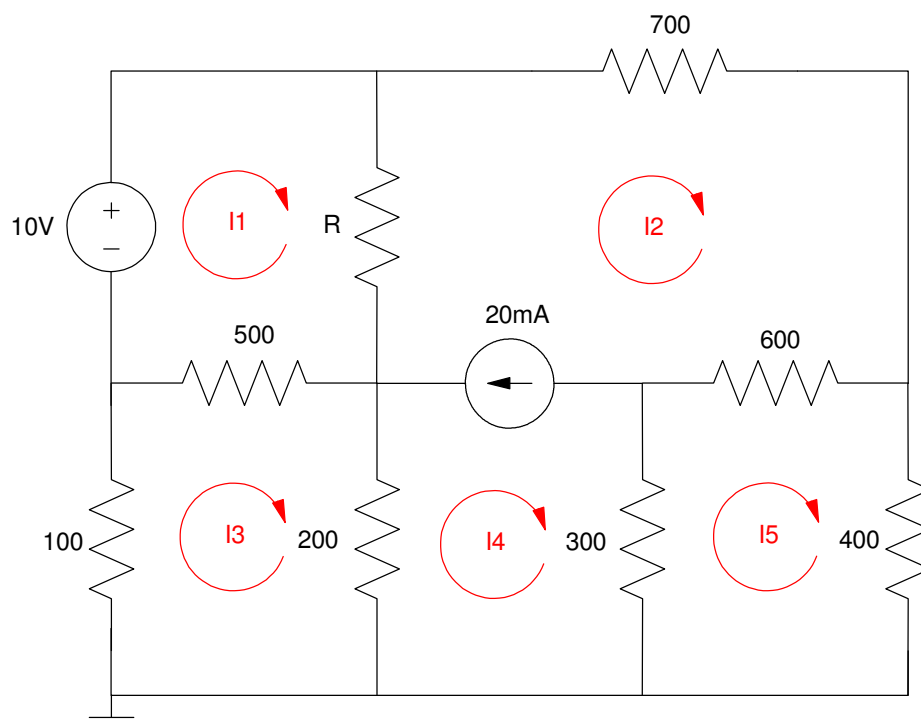
3) Give N voltage node equations to solve for the N unknown voltages. Assume

- $R = 800 + 100 \cdot (\text{your birth month}) + (\text{your birth date})$ . For example, May 14th would give  $R = 1314$



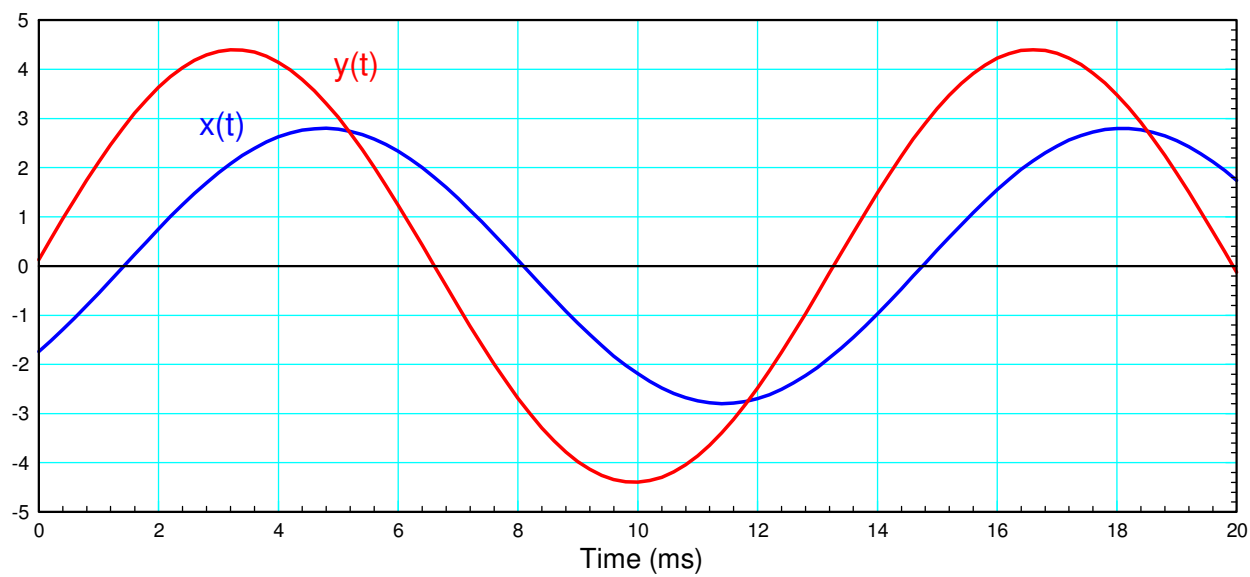

4) Give N current loop equations to solve for the N unknown currents. Assume

- $R = 800 + 100 \cdot (\text{your birth month}) + (\text{your birth date})$ . For example, May 14th would give  $R = 1314$




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  $V_2(t)$  assuming

$$V_1(t) = 12 + 13 \sin(\omega t)$$

$\omega = 800 + 100 \cdot (\text{your birth month}) + (\text{your birth date})$ . For example, May 14th would give  $\omega = 1314$

$\omega$ (rad/sec) $800 + 100 \cdot \text{mo} + \text{day}$	$V_2(t)$

