## ECE 320 - Quiz #1 - Name

EE 206 Review. January 21, 2021

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

1) Let R be your birthday

R = 1000 + (month)\*100 + (day)

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

Determine the resistance Rab





## 2) Let R be your birthday

R = 1000 + (month)\*100 + (day)

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

Determine the resistace Rab (it will be a complex number)

R 1000 + 100*month + day	Zab



3) Voltage Nodes. Let R be your birthday

R = 1000 + (month)\*100 + (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 + (month)\*100 + (day)

For example, May 14th would give R = 1410 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	Х		Y	
(Hz)	Amplitude	Phase	Amplitude	Phase



6) Let R be your birthday

R = 1000 + (month)\*100 + (day)

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

Determine V2(t) assuming

$$V_1(t) = 12 + 5\cos(1000t) + 2\sin(1000t)$$

R =	
V2(t) =	

