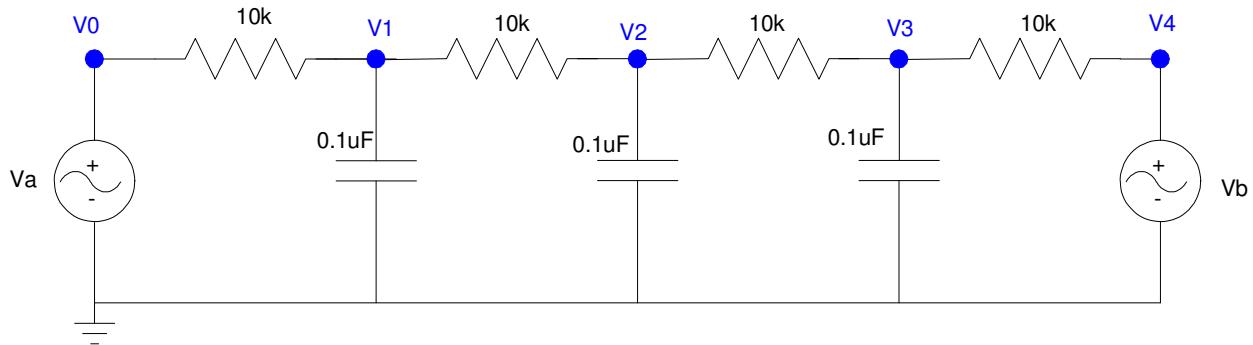


# ECE 211: Lab #11

Superposition with Phasors

Build the following circuit



1) Measure  $V_0 \dots V_4$  (amplitude and phase) with

- $V_a = 5 \cos(628t)$        $5Vp, 100Hz$  sine wave
- $V_b = 0V$

2) Measure  $V_0 \dots V_4$  (amplitude and phase) with

- $V_a = 0V$
- $V_b = 5 \cos(6280t)$        $5Vp, 1kHz$  sine wave

3) Measure  $V_0 \dots V_4$  (amplitude and phase) with

- $V_a = 5 \cos(628t)$
- $V_b = 5 \cos(6280t)$

Do the results add up?

	$V_a = 5 \cos(628t)$ $V_b = 0V$	$V_a = 0V$ $V_b = 5 \cos(6280t)$	$V_a = 5 \cos(628t)$ $V_b = 5 \cos(6280t)$
$V_0$			
$V_1$			
$V_2$			
$V_3$			
$V_4$			

