

Name: \_\_\_\_\_  
 Student ID: \_\_\_\_\_  
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 Section: \_\_\_\_\_  
 Date: \_\_\_\_\_

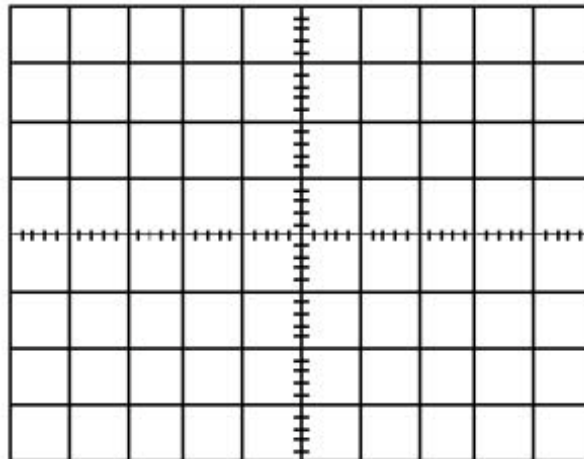
UNIVERSITY OF CALIFORNIA, BERKELEY  
 EE100 Summer 2008 Lab 2

# Equivalent Circuits Report

## Equivalent Resistor Networks

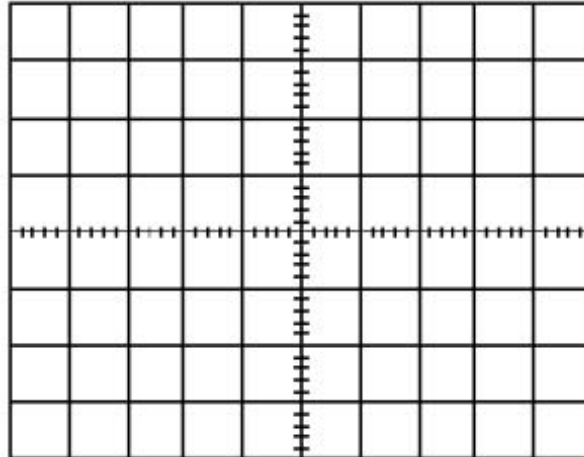
- 1) Step1: Max Current through resistor network: \_\_\_\_\_
- 2) Step 2: Resistance across **A** and **B**. Theory: \_\_\_\_\_ Measured: \_\_\_\_\_
- 3) Step 3:

$V_{AB}$	$I$



4) Step 5:

$V_{AB}$	$I$



5) Steps 6, 7, and 8, measure  $V_{TH}$ ,  $I_{SC}$ , and  $R_{TH}$ . The theoretical values should have been calculated in your prelab.

	Theory	Actual
$V_{TH}$ :		
$I_{SC}$ :		
$R_{TH}$ :		

6) Steps 9-13

	Original		Thevenin		Norton	
	$V$	$I$	$V$	$I$	$V$	$I$
220.						
1.2k.						
2.2k.						

7) Steps 14 - 16.

What is the frequency of the output wave between terminal C and D

Note the differences, if any, between the input and output wave forms

What can be said about the relationship of the input and output wave forms when a sinusoidal signal is passed through a purely resistive network.

8) Step 17.

	<b>Theory</b>	<b>Measured</b>
<b>R<sub>eq</sub></b>		

9.) Steps 18 & 19.

	<b>Current</b>
<b>A-D</b>	
<b>D-C</b>	
<b>D-G</b>	