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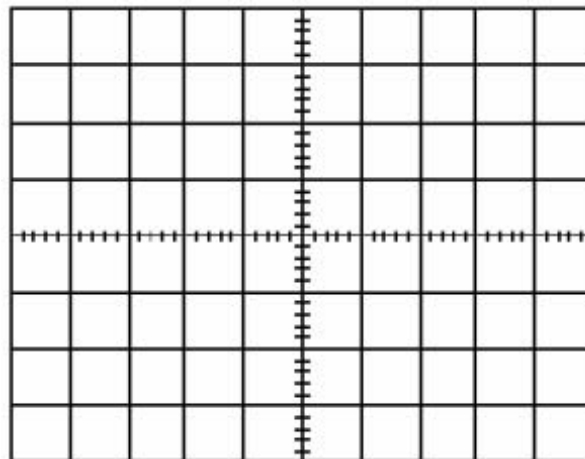
UNIVERSITY OF CALIFORNIA, BERKELEY
 EE40: Introduction to Microelectronic Circuits

Equivalent Circuits Report

Equivalent Resistor Networks

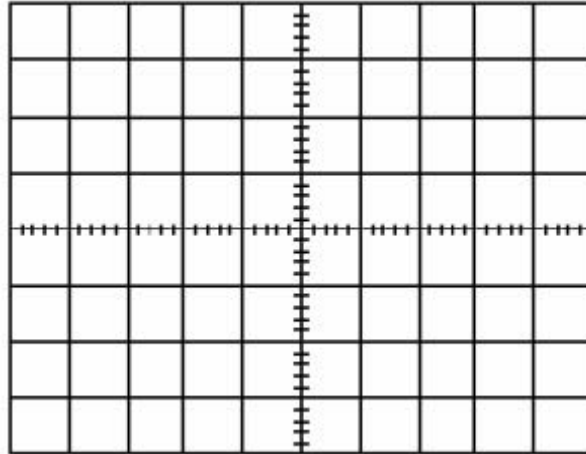
- 1) Step 1: Max Current through resistor network: _____
- 2) Step 2: Resistance across **A** and **B**. Theory: _____ Measured: _____
- 3) Step 3:

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.

	Theory	Measured
R_{eq}		

9.) Steps 18 & 19.

	Current
A-D	
D-C	
D-G	

20. Predict what the amperage through points C and F will be. Comment on the symmetry of this circuit and include four equivalent point pairs.