جامعة بيرزيت

BIRZEIT UNIVERSITY

Physics Department

Physics 112

Experiment3

Network analysis II
The Thevenin and Norton techniques

Student's name:
Student's No.:

Partner's name:
Partners No.:

Section:

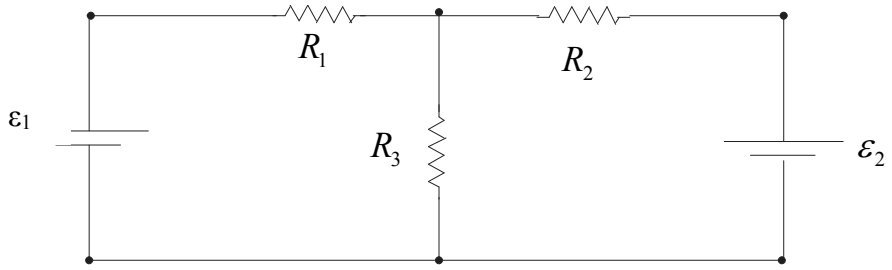
Instructor:

Date:

Abstract:

Theory:

Calculations:



For the circuit shown:

a) Use Thevenin's equivalent circuit techniques to find the current passing through R_3.
b) Use Norton's equivalent circuit techniques to find the current passing through R_2.

Data:

R_1= , R_2= , R_3=
ε_1= ε_2 =

(a) Remove R_3 , kill both sources and measure R_{eq}:

R_{eq}=

(b) Connect the sources back and measure ε_{eq}:

ε_{eq}=

(c) Measure I_{eq}:

I_{eq}=

(d) Construct Thevenin's equivalent circuit:

Measure I_{RL}=

(e) Construct Norton's equivalent circuit:

Measure I_{RL}=

Results and conclusion: