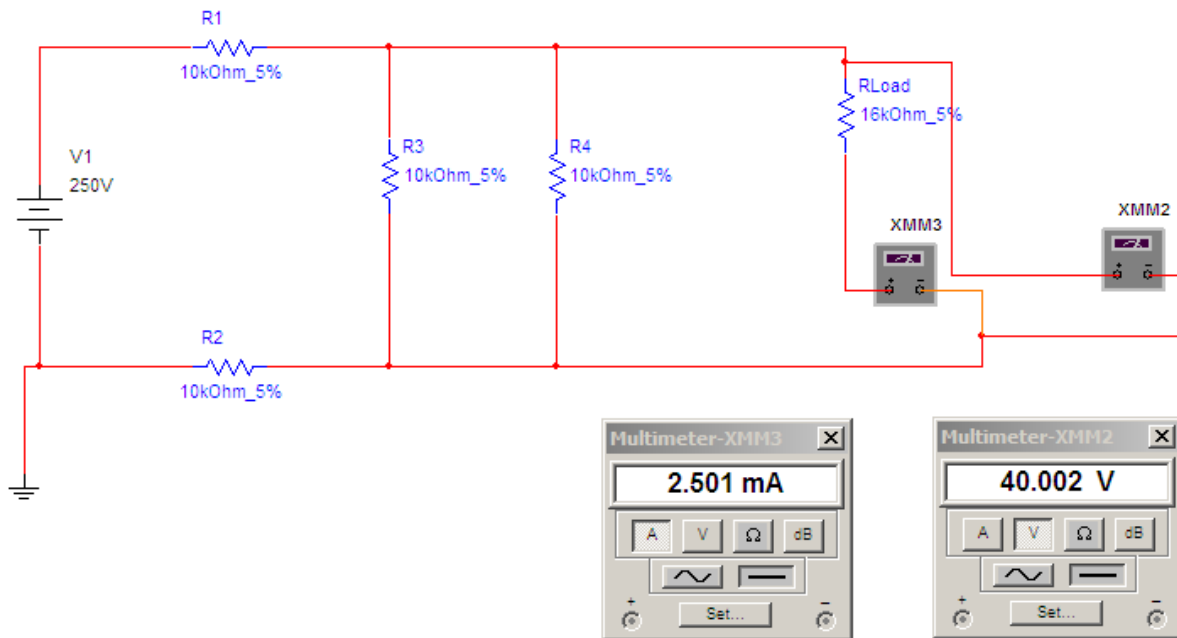Umar Khan/ Alex Wall

Professor Joshua Hayter

CECS 211
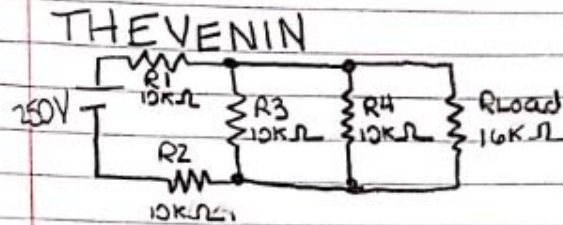
11 October 2016

Lab 6

Section 1:

Section 2:

THEVENIN

$R_T = 10k\Omega + \left(\dfrac{1}{\frac{1}{10k\Omega} + \frac{1}{10k\Omega}}\right) + 10k\Omega$

$R_T = 10k\Omega + 5.k\Omega + 10k\Omega$

$R_T = 25k\Omega$

$I_T = \dfrac{250V}{25k\Omega} = 10mA$

$V_{R1} = 10mA \cdot 10k\Omega = 100V$
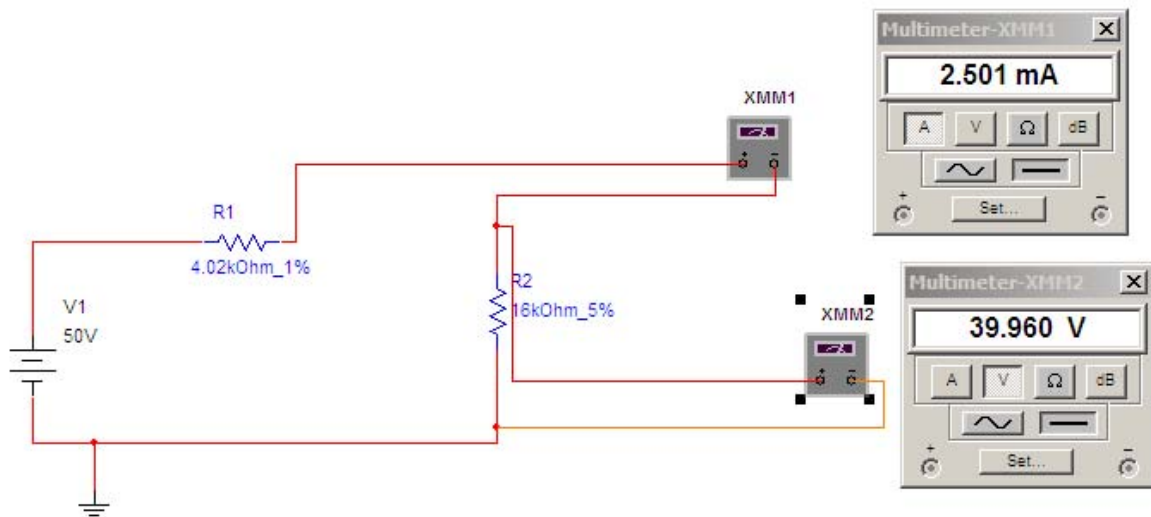
$V_{R2} = 10mA \cdot 10k\Omega = 100V$

$V_{TH} = 250 - 100 - 100 = 50V$

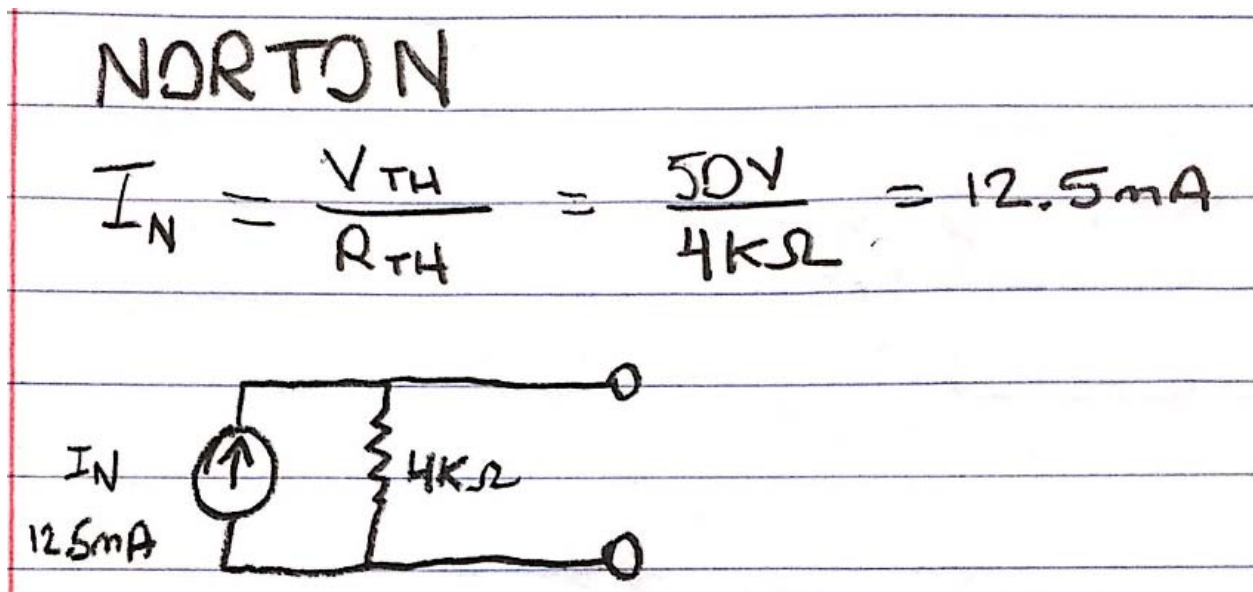$R_{TH} = \dfrac{1}{20k\Omega} + \dfrac{1}{10k\Omega} + \dfrac{1}{10k\Omega}$

$R_{TH} = 4K\Omega$

V_{TH} $R_{TH} = 4K\Omega$
50V

Section 3:

Multimeter-XMM1 ☒
2.501 mA
| A | V | Ω | dB |
Set...

R1
4.02kOhm_1%

V1
50V

R2
16kOhm_5%

XMM1

XMM2

Multimeter-XMM2 ☒
39.960 V
| A | V | Ω | dB |
Set...

Section 4:

NORTON

$$I_N = \frac{V_{TH}}{R_{TH}} = \frac{50V}{4k\Omega} = 12.5mA$$

I_N
12.5mA

4KΩ

Section 5:

Multimeter-XMM1	☒
2.508 mA	

Multimeter-XMM2	☒
40.160 V	