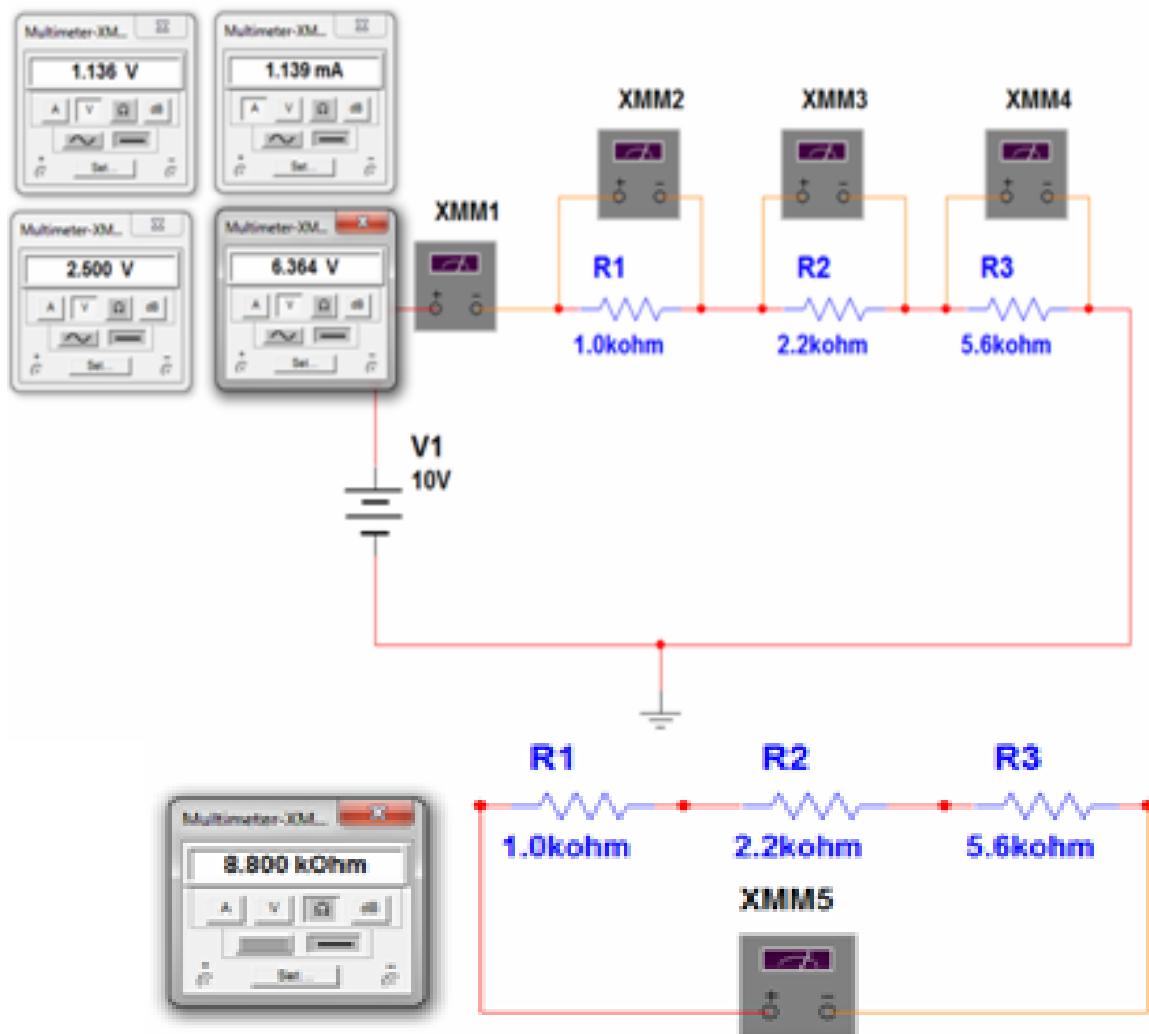
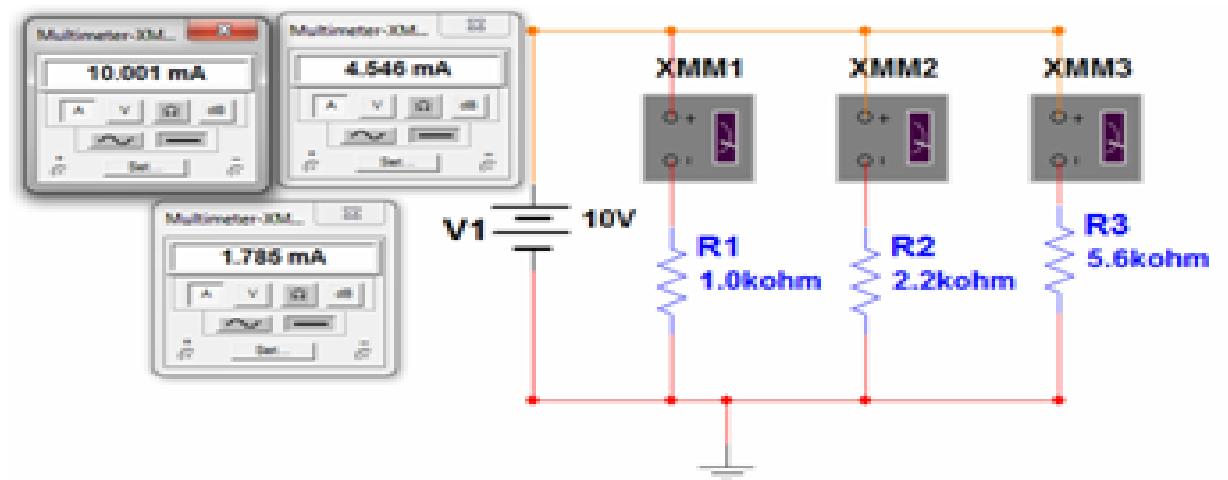
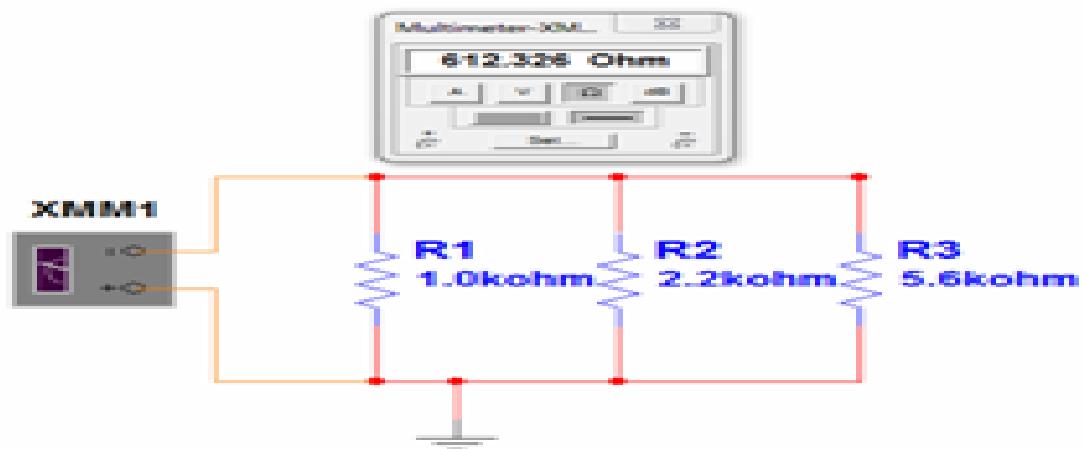


# 1. resistors in series:



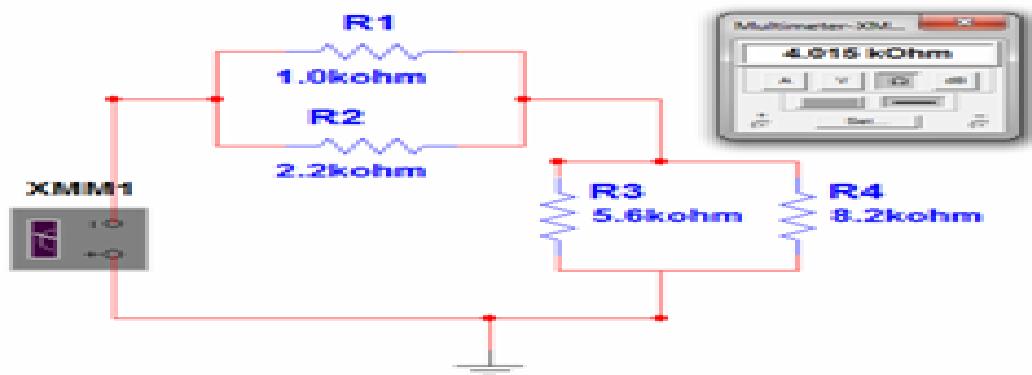
parameter	R1	R2	R3	Req	Vs	VR1	VR2	VR3	Is
theoretical	1 kΩ	2.2 kΩ	5.6 kΩ	8.8 kΩ	10 v	1.13 v	2.5 v	6.3 v	1.13 mA

## 2.resistor in parallel:

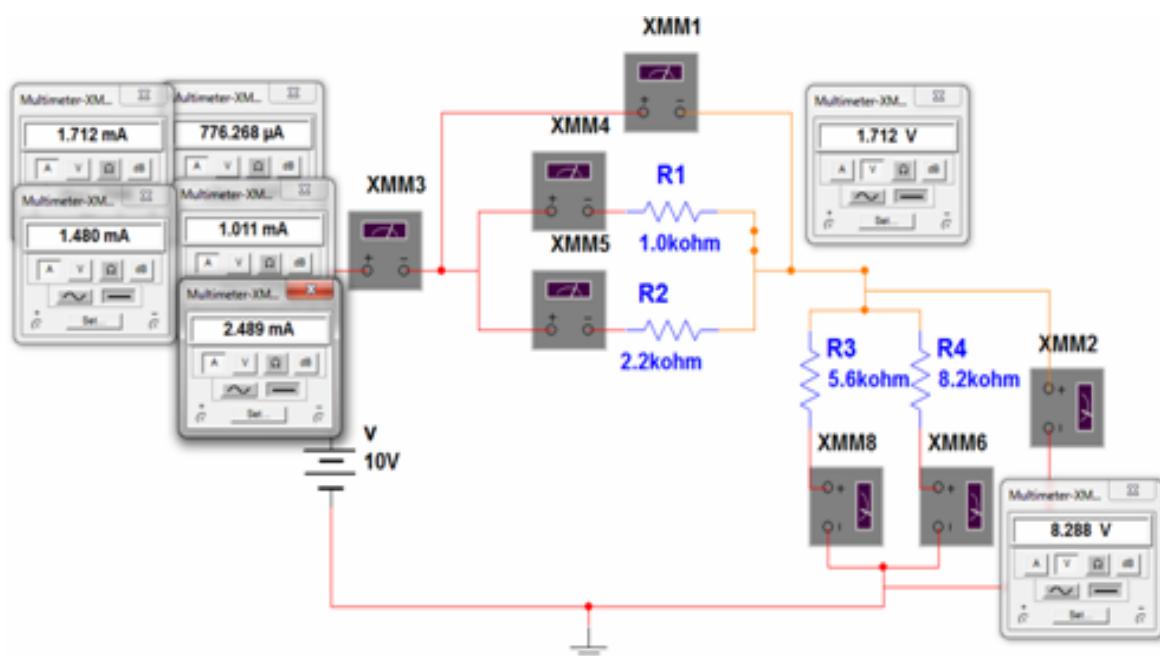


parameter	R1	R2	R3	Req	Vs	IR1	IR2	IR3
theoretical	1 kΩ	2.2 kΩ	5.6 kΩ	0.612 kΩ	10 v	10 mA	4.5 mA	1.78 mA

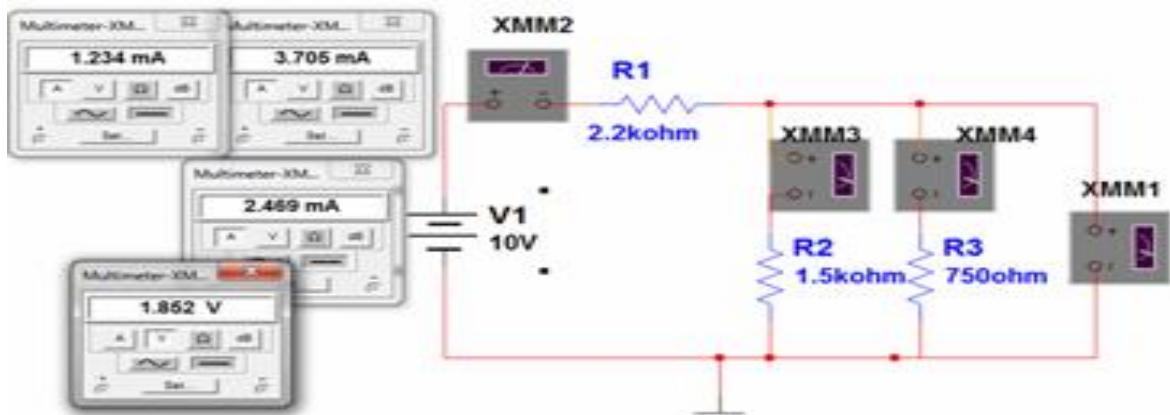
### 3. series-parallel combination:



Parameter	theoretical	Parameter	theoretical
R1	1KΩ	IR1	1.71mA
R2	2.2KΩ	IR2	0.78mA
R3	5.6KΩ	IR3	1.48mA
R4	8.2K Ω	IR4	1.01mA
R <sub>a-c</sub>	4.015KΩ	I <sub>s</sub>	2.49mA
V <sub>ab</sub>	1.71V	V <sub>b</sub>	8.29V

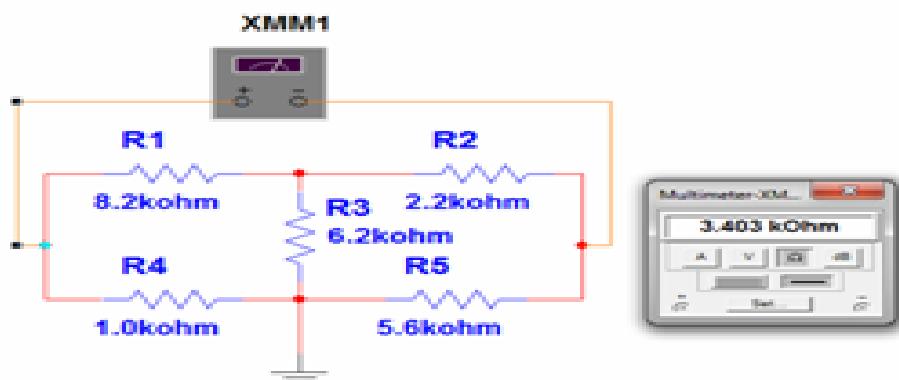


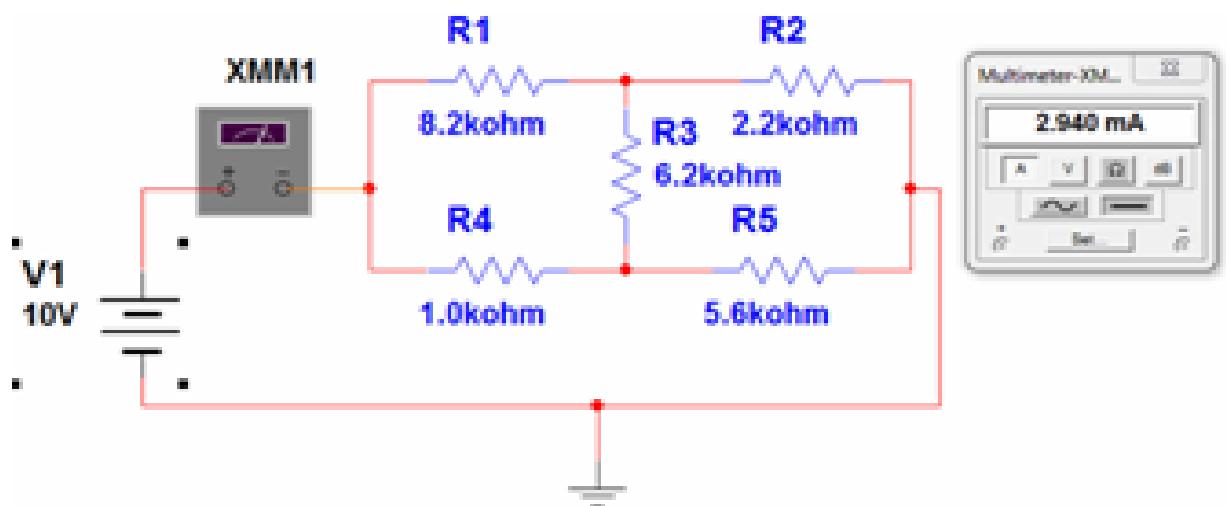
## 4.voltage & current divider:



parameter	R1	R2	R3	Vs	Vo	Is	I1	I2
theoretical	2.2kΩ	1.5kΩ	0.75kΩ	10v	1.85 v	3.71mA	1.23mA	2.46mA

## 5.Delta combination:





parameter	<b>Vs</b>	<b>R1</b>	<b>R2</b>	<b>R3</b>	<b>R4</b>	<b>R5</b>	<b>Rx-y</b>	<b>Is</b>
theoretical	<b>10v</b>	<b>8.2kΩ</b>	<b>2.2kΩ</b>	<b>6.2kΩ</b>	<b>1kΩ</b>	<b>5.6kΩ</b>	<b>3.4kΩ</b>	<b>2.9mA</b>



The Hashemite University  
Faculty Of Engineering  
Department of Electrical Engineering  
Electrical Circuit Lab  
(409300)

Experiment "2" (Measurements on DC Circuits)  
Prelab "2"

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- \*Student Name:
- \*ID:
- \*Date: 22/june/2010
- \*Day: Tuesday