Still More Circuit Analysis

Read from **Lesson 4** of the **Current Electricity** chapter at **The Physics Classroom**:

> **http://www.physicsclassroom.com/Class/circuits/u9l4b.html**
> **http://www.physicsclassroom.com/Class/circuits/u9l4c.html**
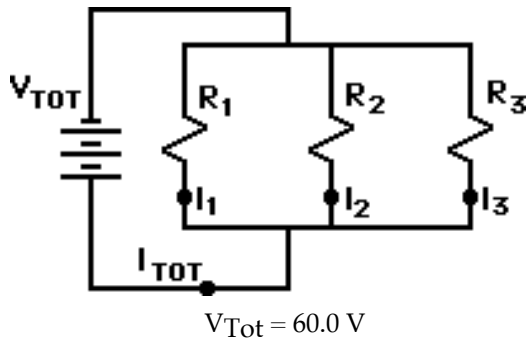> **http://www.physicsclassroom.com/Class/circuits/u9l4d.html**

MOP Connection: Electric Circuits: sublevel 11

1.   Fill in the blanks in the following diagram. Show appropriate units.

$R_{Tot}=$ _____ $I_{Tot} =$ _____
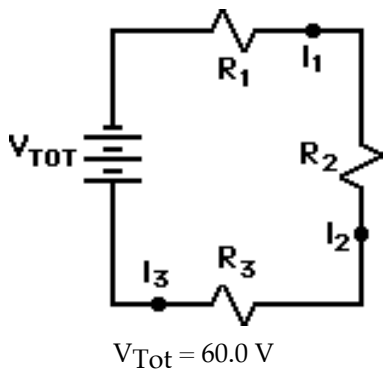
$\Delta V_1=$ _____ $I_1 =$ _____

$\Delta V_2=$ _____ $I_2 =$ _____

$\Delta V_3=$ _____ $I_3 =$ _____

$V_{Tot} = 60.0$ V

$R_1 = 12.5\ \Omega$ $R_2 = 14.7\ \Omega$ $R_3 = 19.1\ \Omega$

2.   Fill in the blanks in the following diagram. Show appropriate units.

$R_{Tot}=$ _____ $I_{Tot} =$ _____
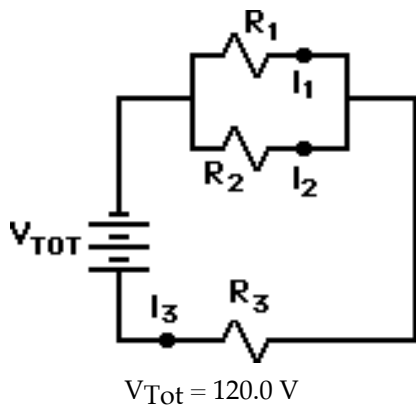
$\Delta V_1=$ _____ $I_1 =$ _____

$\Delta V_2=$ _____ $I_2 =$ _____

$\Delta V_3=$ _____ $I_3 =$ _____

$V_{Tot} = 60.0$ V

$R_1 = 12.5\ \Omega$ $R_2 = 14.7\ \Omega$ $R_3 = 19.1\ \Omega$

3.   Fill in the blanks in the following diagram. Show appropriate units.

$R_{Tot}=$ _____ $I_{Tot} =$ _____
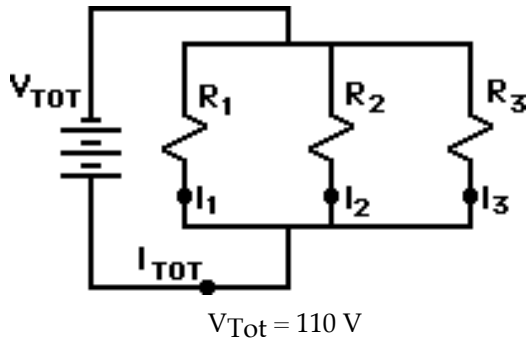
$\Delta V_1=$ _____ $I_1 =$ _____

$\Delta V_2=$ _____ $I_2 =$ _____

$\Delta V_3=$ _____ $I_3 =$ _____

$V_{Tot} = 120.0$ V

$R_1 = 16.0\ \Omega$ $R_2 = 16.0\ \Omega$ $R_3 = 6.0\ \Omega$

4. Fill in the blanks in the following diagram. Show appropriate units.
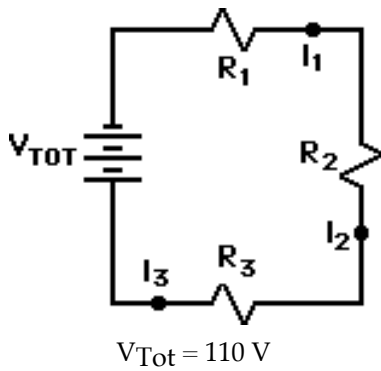
$R_{Tot}=$ _____ $I_{Tot} =$ _____

$\Delta V_1=$ _____ $I_1 =$ _____

$\Delta V_2=$ _____ $I_2 =$ _____

$\Delta V_3=$ _____ $I_3 =$ _____

$V_{Tot} = 110$ V

$R_1 = 8.6 \, \Omega$ $R_2 = 5.4 \, \Omega$ $R_3 = 9.2 \, \Omega$
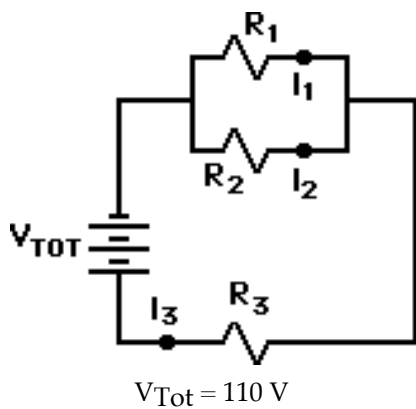

5. Fill in the blanks in the following diagram. Show appropriate units.

$R_{Tot}=$ _____ $I_{Tot} =$ _____

$\Delta V_1=$ _____ $I_1 =$ _____

$\Delta V_2=$ _____ $I_2 =$ _____

$\Delta V_3=$ _____ $I_3 =$ _____

$V_{Tot} = 110$ V

$R_1 = 8.6 \, \Omega$ $R_2 = 5.4 \, \Omega$ $R_3 = 9.2 \, \Omega$

6. Fill in the blanks in the following diagram. Show appropriate units.

$R_{Tot}=$ _____ $I_{Tot} =$ _____

$\Delta V_1=$ _____ $I_1 =$ _____

$\Delta V_2=$ _____ $I_2 =$ _____

$\Delta V_3=$ _____ $I_3 =$ _____

$V_{Tot} = 110$ V

$R_1 = 8.6 \, \Omega$ $R_2 = 5.4 \, \Omega$ $R_3 = 9.2 \, \Omega$