

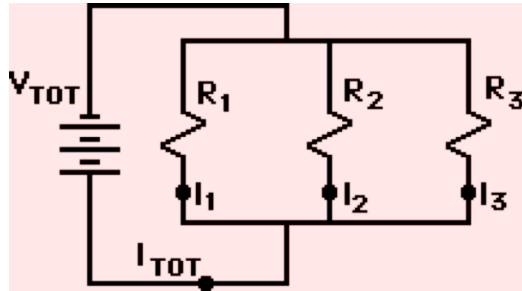
### Circuit Analysis

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.



$V_{Tot} = 60.0 \text{ V}$

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

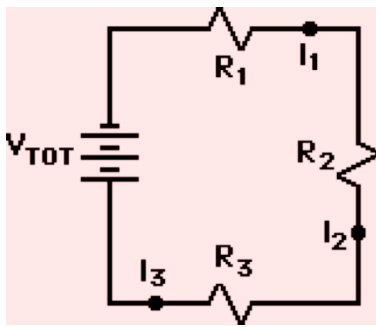
$R_{Tot} =$  \_\_\_\_\_     $I_{Tot} =$  \_\_\_\_\_

$\Delta V_1 =$  \_\_\_\_\_     $I_1 =$  \_\_\_\_\_

$\Delta V_2 =$  \_\_\_\_\_     $I_2 =$  \_\_\_\_\_

$\Delta V_3 =$  \_\_\_\_\_     $I_3 =$  \_\_\_\_\_

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



$V_{Tot} = 60.0 \text{ V}$

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

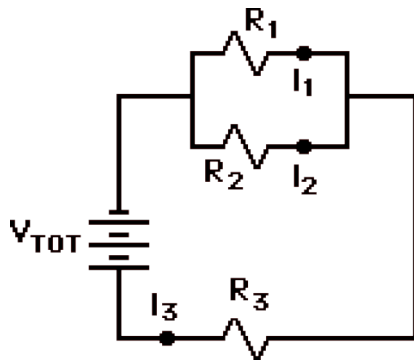
$R_{Tot} =$  \_\_\_\_\_     $I_{Tot} =$  \_\_\_\_\_

$\Delta V_1 =$  \_\_\_\_\_     $I_1 =$  \_\_\_\_\_

$\Delta V_2 =$  \_\_\_\_\_     $I_2 =$  \_\_\_\_\_

$\Delta V_3 =$  \_\_\_\_\_     $I_3 =$  \_\_\_\_\_

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



$V_{Tot} = 120.0 \text{ V}$

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

$R_{Tot} =$  \_\_\_\_\_     $I_{Tot} =$  \_\_\_\_\_

$\Delta V_1 =$  \_\_\_\_\_     $I_1 =$  \_\_\_\_\_

$\Delta V_2 =$  \_\_\_\_\_     $I_2 =$  \_\_\_\_\_

$\Delta V_3 =$  \_\_\_\_\_     $I_3 =$  \_\_\_\_\_