

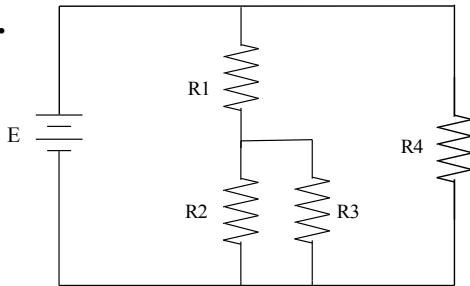
## Series-Parallel Circuit Worksheet #3

**Meets NATEF Task:** (A6-A-2) Diagnose Electrical/Electronic Integrity for Series, Parallel, and Series-Parallel Circuits Using Principles of Electricity (Ohm's Law). (P-1)

Name \_\_\_\_\_ Date \_\_\_\_\_ Time on Task \_\_\_\_\_

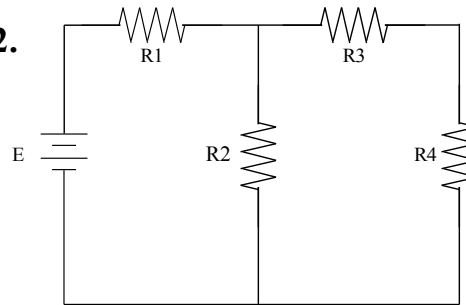
Make/Model/Year \_\_\_\_\_ VIN \_\_\_\_\_ Evaluation: 4 3 2 1

1.



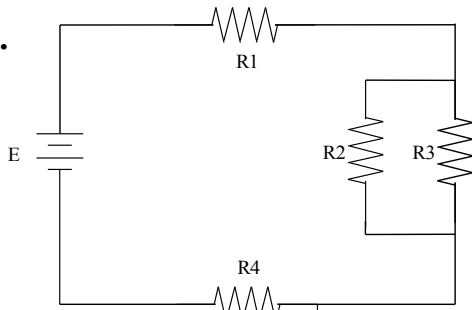
$E = 12 \text{ volts}$        $R2 = 12 \text{ ohms}$   
 $I_T = 2 \text{ amperes}$      $R3 = \underline{\hspace{2cm}}$   
 $R1 = 6 \text{ ohms}$          $R4 = 12 \text{ ohms}$

2.



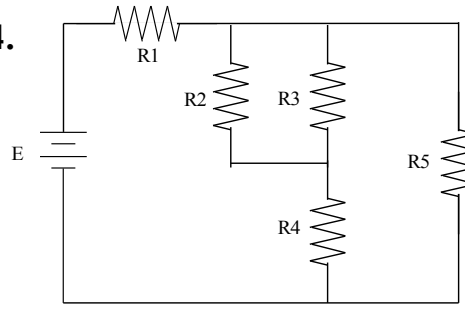
$E = 24 \text{ volts}$        $R2 = 8 \text{ ohms}$   
 $I_T = \underline{\hspace{2cm}}$        $R3 = 4 \text{ ohms}$   
 $R1 = 2 \text{ ohms}$        $R4 = 4 \text{ ohms}$

3.



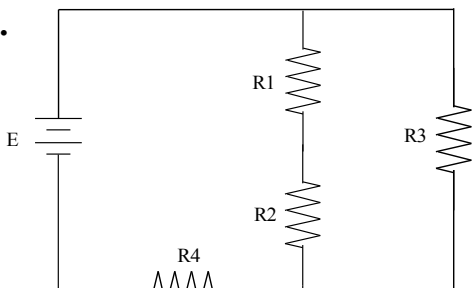
$E = \underline{\hspace{2cm}}$        $R2 = 12 \text{ ohms}$   
 $I_T = 1 \text{ ampere}$      $R3 = 12 \text{ ohms}$   
 $R1 = 2 \text{ ohms}$        $R4 = 4 \text{ ohms}$

4.



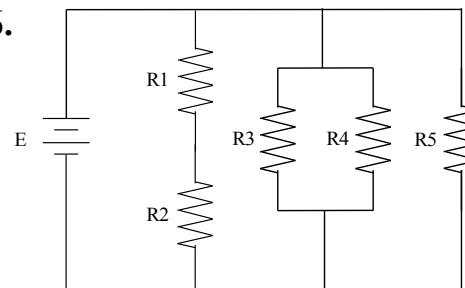
$E = 24 \text{ volts}$      $R2 = 12 \text{ ohms}$      $R5 = 12 \text{ ohms}$   
 $I_T = \underline{\hspace{2cm}}$      $R3 = 12 \text{ ohms}$   
 $R1 = 6 \text{ ohms}$      $R4 = 6 \text{ ohms}$

5.



$E = 24 \text{ volts}$        $R2 = 2 \text{ ohms}$   
 $I_T = 6 \text{ amperes}$      $R3 = \underline{\hspace{2cm}}$   
 $R1 = 2 \text{ ohms}$        $R4 = 2 \text{ ohms}$

6.



$E = \underline{\hspace{2cm}}$        $R2 = 4 \text{ ohms}$      $R5 = 4 \text{ ohms}$   
 $I_T = 12 \text{ amperes}$      $R3 = 16 \text{ ohms}$   
 $R1 = 4 \text{ ohms}$        $R4 = 16 \text{ ohms}$