

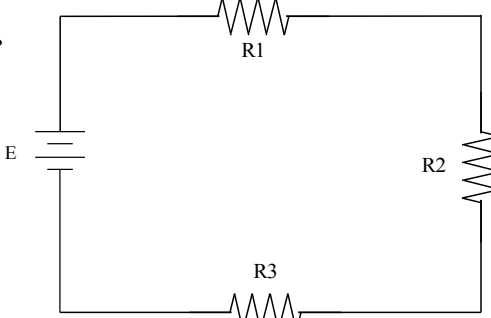
Series Circuit Worksheet #2

Meets NATEF Task: (A6-A-5) Diagnose electrical/electronic integrity for series, parallel, and series-parallel circuits using principles of electricity. (Ohm's Law).

Name _____ Date _____ Time on Task _____

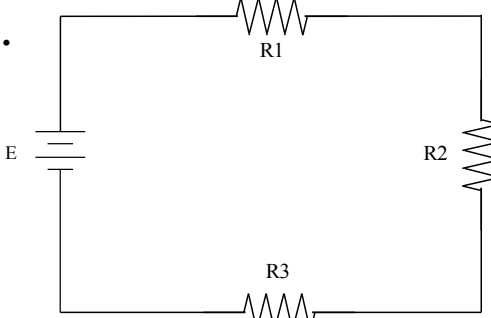
Make/Model/Year _____ VIN _____ Evaluation: 4 3 2 1

1.



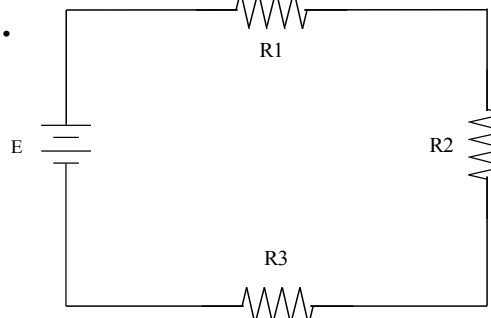
$E = \underline{\hspace{2cm}}$ $R2 = 1 \text{ ohm}$
 $I_T = 8 \text{ amperes}$ $R3 = 1 \text{ ohm}$
 $R1 = 1 \text{ ohm}$

2.



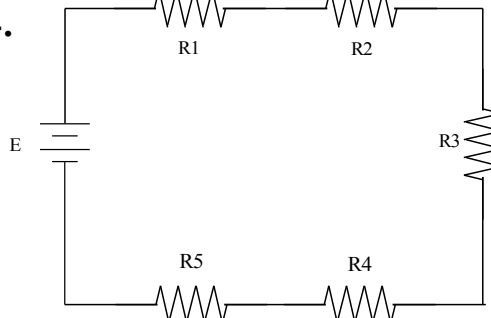
$E = 24 \text{ volts}$ $R2 = 2 \text{ ohms}$
 $I_T = \underline{\hspace{2cm}}$ $R3 = 2 \text{ ohms}$
 $R1 = 2 \text{ ohms}$

3.



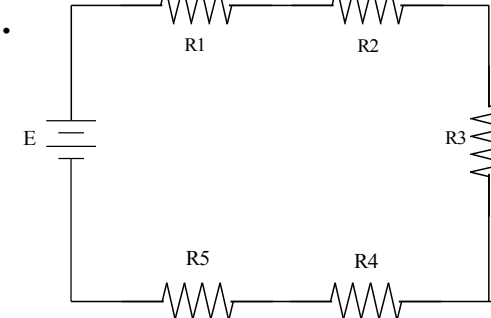
$E = 24 \text{ volts}$ $R2 = 1 \text{ ohm}$
 $I_T = 4 \text{ amperes}$ $R3 = \underline{\hspace{2cm}}$
 $R1 = 3 \text{ ohms}$

4.



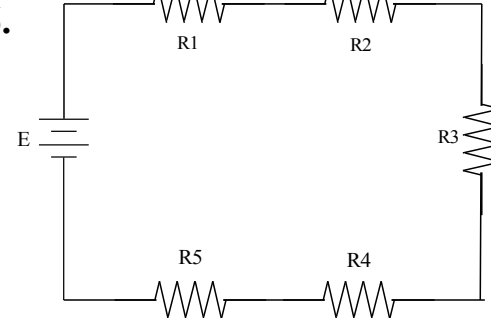
$E = 12 \text{ volts}$ $R2 = \underline{\hspace{2cm}}$ $R5 = 1 \text{ ohm}$
 $I_T = 2 \text{ amperes}$ $R3 = 2 \text{ ohms}$
 $R1 = 1 \text{ ohm}$ $R4 = 1 \text{ ohm}$

5.



$E = 24 \text{ volts}$ $R2 = 4 \text{ ohms}$ $R5 = 1 \text{ ohm}$
 $I_T = 2 \text{ amperes}$ $R3 = \underline{\hspace{2cm}}$
 $R1 = 2 \text{ ohms}$ $R4 = 1 \text{ ohm}$

6.



$E = \underline{\hspace{2cm}}$ $R2 = 1 \text{ ohm}$ $R5 = 2 \text{ ohms}$
 $I_T = 3 \text{ amperes}$ $R3 = 2 \text{ ohms}$
 $R1 = 2 \text{ ohms}$ $R4 = 1 \text{ ohm}$