

# Circuits Puzzle

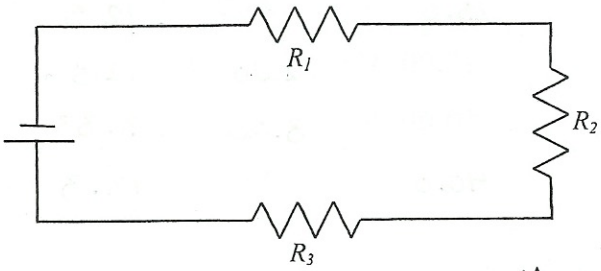
## Resistors & Capacitors WS 9

Names:

Name: KEY

Date \_\_\_\_\_ Per \_\_\_\_\_ total

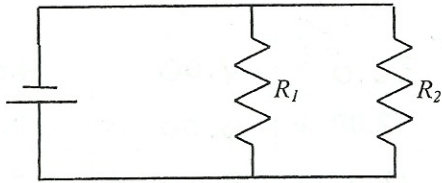
1.



	V	I	R
Battery	36.0 V	2.00 A	$\Omega$
R <sub>1</sub>	8.00 V	2.00 A	4.00 $\Omega$
R <sub>2</sub>	12.0 V	2.00 A	6.00 $\Omega$
R <sub>3</sub>	16.0 V	2.00 A	8.00 $\Omega$

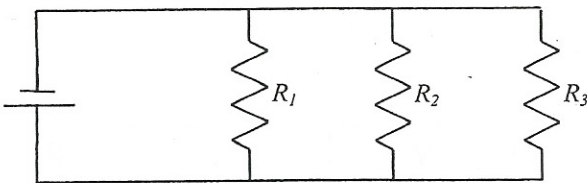
voltage drop across R<sub>3</sub>

2.



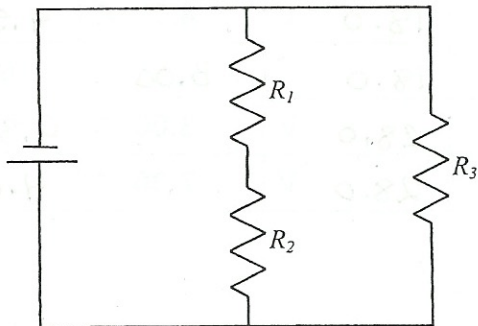
	V	I	R
Battery	12.00 V	9.00 A	$\Omega$
R <sub>1</sub>	12.0 V	6.00 A	2.00 $\Omega$
R <sub>2</sub>	12.0 V	3.00 A	4.00 $\Omega$

3.



	V	I	R
Battery	36.0 V	6.00 A	6.00 $\Omega$
R <sub>1</sub>	36.0 V	2.00 A	18.0 $\Omega$
R <sub>2</sub>	36.0 V	3.00 A	12.00 $\Omega$
R <sub>3</sub>	36.0 V	1.00 A	36.0 $\Omega$

4.



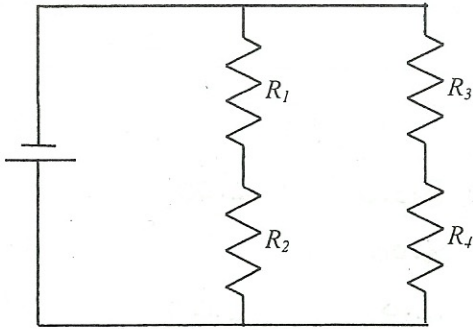
	V	I	R
Battery	12.00 V	2.00 A	6.00 $\Omega$
R <sub>1</sub>	7.20 V	1.20 A	6.00 $\Omega$
R <sub>2</sub>	4.80 V	1.20 A	4.00 $\Omega$
R <sub>3</sub>	12.0 V	0.80 A	15.00 $\Omega$

5. Draw picture.

answers may vary

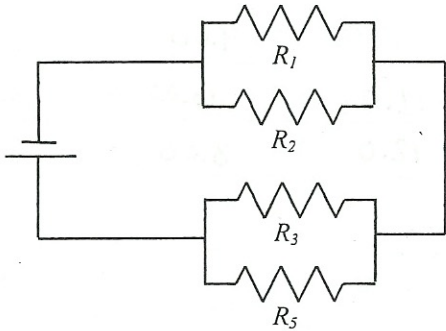
	V	I	R
Battery	24.00 V	A	$\Omega$
R <sub>1</sub>	8.00 V	A	$\Omega$
R <sub>2</sub>	V	4.00 A	$\Omega$
R <sub>3</sub>	V	2.00 A	$\Omega$

6.



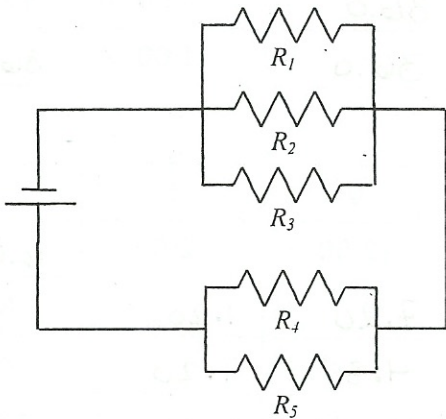
	V	I	R
Battery	50.00 V	5.00 A	10.0 Ω
R <sub>1</sub>	25.0 V	2.00 A	12.5 Ω
R <sub>2</sub>	25.00 V	2.00 A	12.5 Ω
R <sub>3</sub>	10.00 V	3.00 A	3.33 Ω
R <sub>4</sub>	40.0 V	3.00 A	13.3 Ω

7.



	V	I	R
Battery	36.0 V	9.00 A	4.00 Ω
R <sub>1</sub>	12.00 V	6.00 A	2.00 Ω
R <sub>2</sub>	12.0 V	3.00 A	4.00 Ω
R <sub>3</sub>	24.00 V	6.00 A	4.00 Ω
R <sub>4</sub>	24.0 V	3.00 A	8.00 Ω

8.



	V	I	R
Battery	46.00 V	10.0 A	4.60 Ω
R <sub>1</sub>	18.0 V	3.00 A	6.00 Ω
R <sub>2</sub>	18.0 V	4.00 A	4.50 Ω
R <sub>3</sub>	18.0 V	3.00 A	6.00 Ω
R <sub>4</sub>	28.0 V	3.00 A	9.33 Ω
R <sub>5</sub>	28.0 V	7.00 A	4.00 Ω