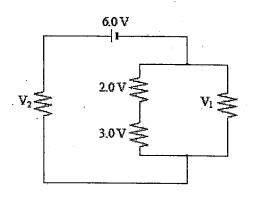
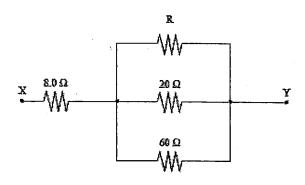
## **Electric Circuits Worksheet**

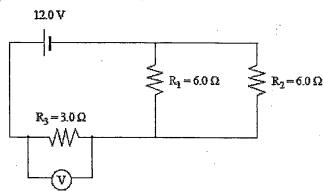
1. What are the potential differences,  $V_1$  and  $V_2$ , in the circuit shown?



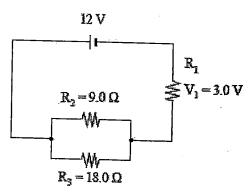
2. The total resistance between points X and Y is 14.0  $\Omega$ . What is the value of R ?



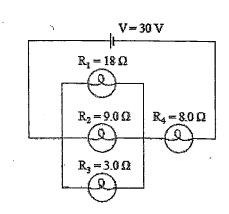
3. A voltmeter is connected across a 3.0  $\Omega$  resistor in the circuit shown. What is the reading on the voltmeter?



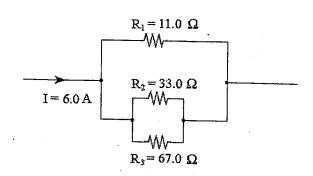
4. Find the current through the battery in the circuit shown.



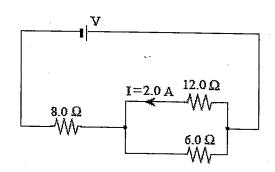
5. Find the current in the 8.0  $\Omega$  bulb shown.



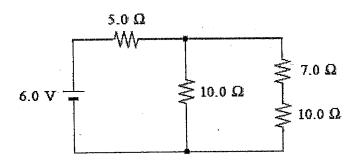
6. The diagram shows part of an electrical circuit. What is the current through resistor R<sub>1</sub>?



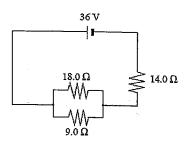
7. What is the voltage, V, of the power supply shown in the circuit?



8. What is the current through the 7.0  $\Omega$  resistor? How much charge flows through the 7.0  $\Omega$  resistor in a 30 second interval?



9. What is the power dissipated in the 9.0  $\Omega$  resistor in the following circuit?



10. In the following circuit, what is the power dissipated by resistor  $R_1\ \mbox{?}$ 

