CHAPTER 9 Parallel Circuits

BLM 3-29

Goal • Review your understanding of parallel circuits.

What to Do

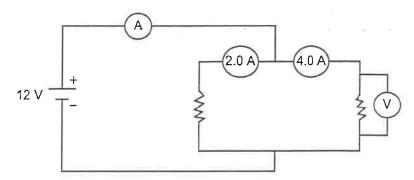
Circle the best term in the parentheses to correctly complete each statement.

- 1. A parallel circuit has (only one, more than one) path for current to travel.
- 2. Two different resistors are connected in parallel. The current through one of the resistors will be (equal to, different from) the current through the other resistor.
- 3. If two different resistors are connected in parallel, the voltage across one resistor will be (equal to, different from) the voltage across the second resistor.
- 4. By adding a resistor in parallel with an original resistor, the total resistance of the circuit (increases, decreases).
- 5. The total current entering the junction of a parallel circuit must be (equal to, different from) the sum of the currents through each branch of the parallel circuit.

Find the unknown voltage at V, and current at A, in each of the following circuits.

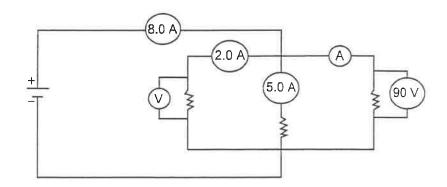
6. Voltage =

Current =



7. Voltage =

Current =



CLASS:

CHAPTER 9

Drawing Series and Parallel Circuit Diagrams

BLM 3-31

Goal • Practise drawing series and parallel circuit diagrams.

NAME:

What to Do

Draw a diagram of each of the following circuits in the spaces provided.

Description	Diagram
1. A series circuit consisting of:	1.
• 12 V electrical source	
open switch	
two light bulbs	
• 10 Ω resistor	
2. A parallel circuit consisting of:	2.
9.0 V electrical source	
• open switch	
• three 5.0 Ω resistors	
3. A circuit consisting of:	3.
• three 1.5 V cells connected in parallel	
open switch	
• two light bulbs connected in series	
• two 15 Ω resistors connected in parallel	