DATE: NAME: CLASS:

CHAPTER 9 **Series Circuits** BLM 3-28

Goal • Review your understanding of series circuits.

What to Do

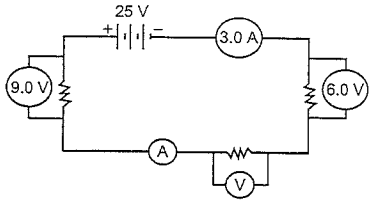
Circle the best term in the parentheses to correctly complete each statement.

1. A series circuit has (*more than one, only one*) path for current to travel.
2. In a series circuit, the current at one location in the circuit is (*equal to, different from*) the current at another location in the circuit.
3. If two different resistors are connected in series, the voltage across one resistor will be (*equal to, different from*) the voltage across the second resistor.
4. By adding a resistor in series with an original resistor, the total resistance of the circuit (*increases, decreases*).
5. The sum of the voltages across each of the resistors in a series circuit is (*equal to, different from*) the voltage supplied by the battery.

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

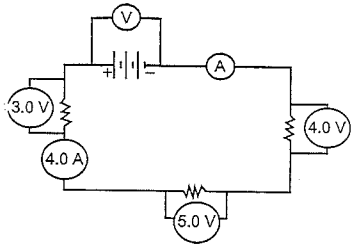
6. Voltage = _____

   Current = _____



7. Voltage = _____

   Current = _____



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DATE: NAME: CLASS:

CHAPTER 9 **Parallel Circuits** BLM 3-29

Goal • Review your understanding of parallel circuits.

What to Do

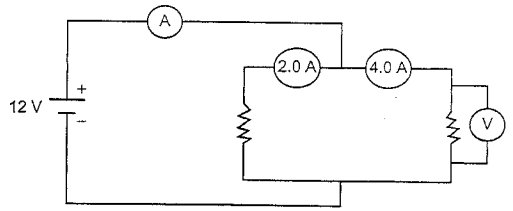
Circle the best term in the parentheses to correctly complete each statement.

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.

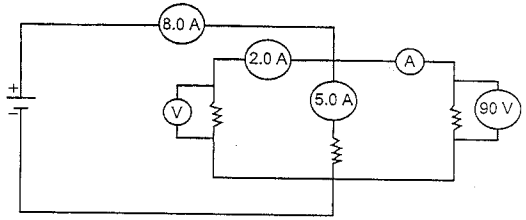
6. Voltage = _____

   Current = _____



7. Voltage = _____

   Current = _____



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DATE: NAME: CLASS:

CHAPTER 8

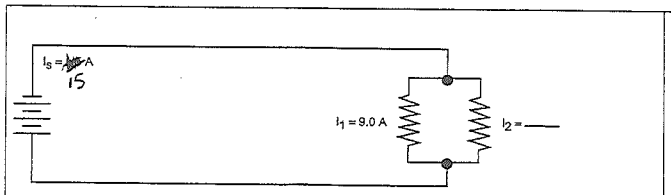
Calculate the Current

BLM 3-17

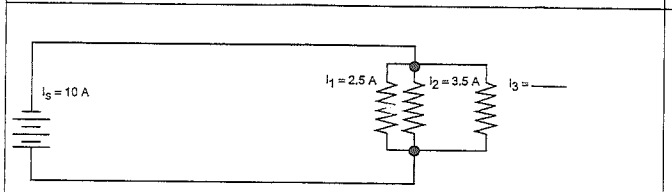
Goal • Practise calculating current.

What to Do

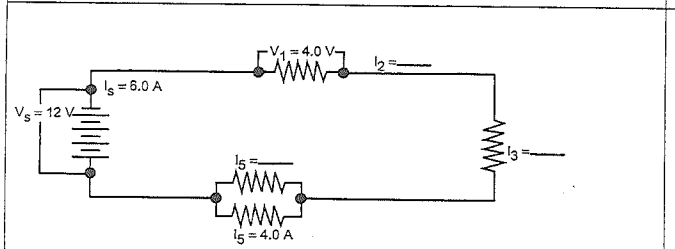
Calculate the current in each of the following circuit diagrams. The current at the source is represented by I_S



1. I_2 = _____



2. I_3 = _____



3. I_2 = _____
I_3 = _____
I_5 = _____

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DATE: NAME: CLASS:

CHAPTER 8

Calculate the Potential Difference

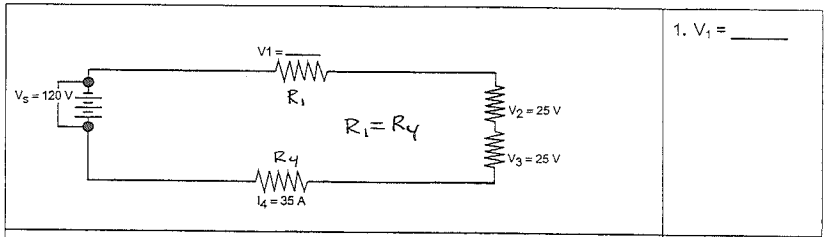
BLM 3-18

Goal • Practise potential difference calculations.

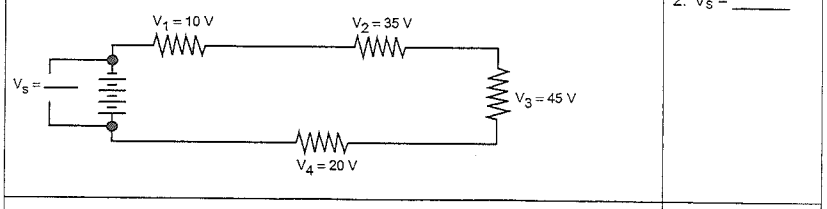
What to Do

Calculate the missing potential difference in each of the following circuit diagrams. The voltage at the source is represented by Vs [V_S]

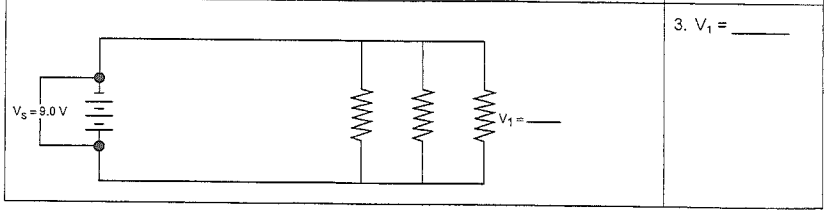
Diagrams



1. V_1 = _____



2. V_S = _____



3. V_1 = _____

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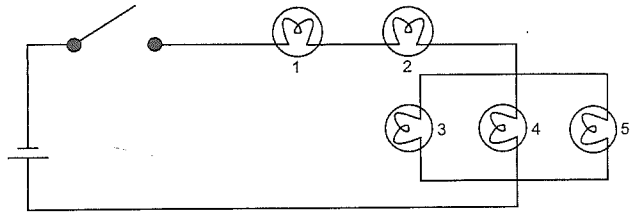
DATE: NAME: CLASS:

CHAPTER 9 **Understanding Circuit Diagrams** BLM 3-32

Goal • Practise interpreting circuit diagrams.

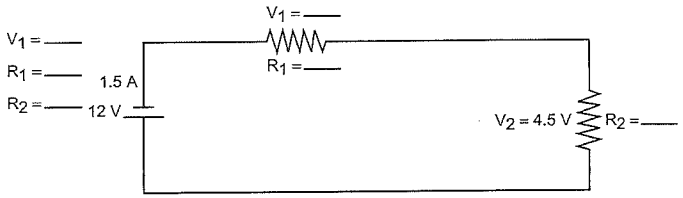
What to Do



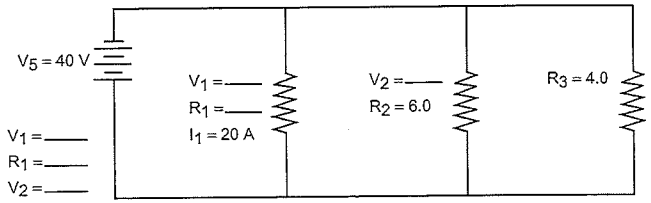
1. Describe what will happen in the circuit shown above if...

   (a) the switch is closed _____
   (b) the switch is closed and the first bulb is removed _____
   (c) the switch is closed and the fifth bulb is removed _____

2. Calculate the missing quantities for the circuit below.



3. Calculate the missing quantities for the circuit below.



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DATE: NAME: ASS:

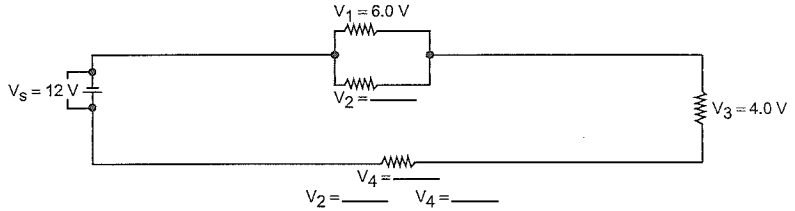
CHAPTER 9 **Calculate Voltage and Current** BLM 3-33

Goal • Practise calculating voltage and current in a circuit.

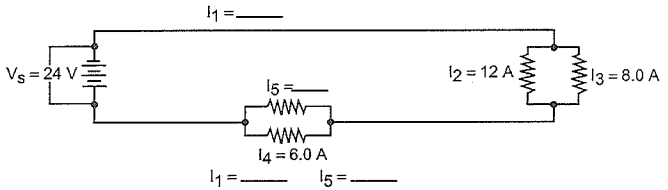
What to Do

Calculate the missing values in the circuits below. Be sure to show your calculations.

1.



2.



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