

Remember that in a parallel circuit:

- the **current** in the branches of the circuit (is the same, adds up).
- the **voltage** drops across each branch (is the same, adds up to) the total voltage.
- to calculate total **resistance**, (add, use reciprocals).

$R_{eq} = \underline{\hspace{2cm}}$ $I_T = \underline{\hspace{2cm}}$ $V_1 = \underline{\hspace{2cm}}$
 $V_2 = \underline{\hspace{2cm}}$ $I_1 = \underline{\hspace{2cm}}$ $I_2 = \underline{\hspace{2cm}}$

$R_{eq} = \underline{\hspace{2cm}}$ $I_T = \underline{\hspace{2cm}}$ $V_T = \underline{\hspace{2cm}}$
 $V_1 = \underline{\hspace{2cm}}$ $I_1 = \underline{\hspace{2cm}}$ $I_2 = \underline{\hspace{2cm}}$

$V_1 = \underline{\hspace{2cm}}$ $V_2 = \underline{\hspace{2cm}}$
 $R_1 = \underline{\hspace{2cm}}$ $R_2 = \underline{\hspace{2cm}}$ $R_T = \underline{\hspace{2cm}}$
 $I_1 = \underline{\hspace{2cm}}$ $I_2 = \underline{\hspace{2cm}}$ $I_T = \underline{\hspace{2cm}}$

$R_{eq} = \underline{\hspace{2cm}}$ $I_T = \underline{\hspace{2cm}}$
 $V_1 = \underline{\hspace{2cm}}$ $V_2 = \underline{\hspace{2cm}}$ $V_3 = \underline{\hspace{2cm}}$
 $I_1 = \underline{\hspace{2cm}}$ $I_2 = \underline{\hspace{2cm}}$ $I_3 = \underline{\hspace{2cm}}$

$V_1 = \underline{\hspace{2cm}}$ $V_2 = \underline{\hspace{2cm}}$
 $I_T = \underline{\hspace{2cm}}$ $I_1 = \underline{\hspace{2cm}}$ $I_2 = \underline{\hspace{2cm}}$
 $R_2 = \underline{\hspace{2cm}}$ $R_T = \underline{\hspace{2cm}}$

$V_1 = \underline{\hspace{2cm}}$ $V_T = \underline{\hspace{2cm}}$
 $I_1 = \underline{\hspace{2cm}}$ $I_2 = \underline{\hspace{2cm}}$
 $R_{eq} = \underline{\hspace{2cm}}$ $I_T = \underline{\hspace{2cm}}$

TWO THIRTY VOLTS

...and all things electrical

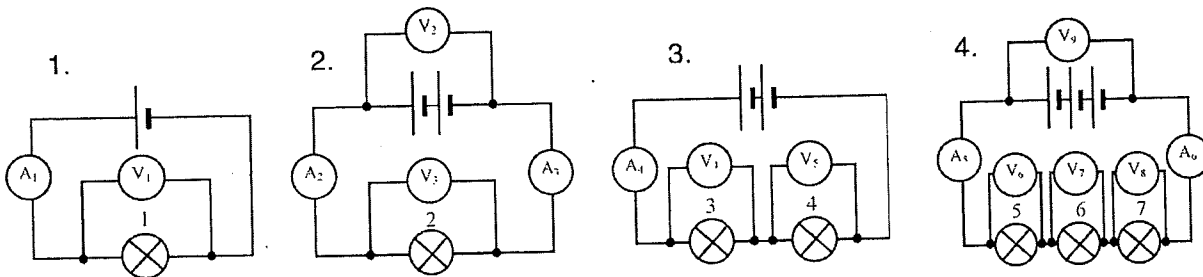
Worksheet: Electrical Circuits – Current & Voltage in Series Circuits.

Measurements:

Ammeter	Reading (A)	Voltmeter	Reading (V)
A ₁		V ₁	
A ₂		V ₂	
A ₃		V ₃	
A ₄		V ₄	
A ₅		V ₅	
A ₆		V ₆	
		V ₇	
		V ₈	
		V ₉	

Explanation of Readings:

Each Resistor is 10Ω , Each Battery is $6V$



1. What will be the reading on voltmeter 5 if bulb 4 blows?
2. What will be the reading on voltmeter 8 if bulb 5 blows?
3. What will be the reading on ammeter 3 if bulb 2 blows?
4. What will be the reading on ammeter 4 if bulb 4 blows?
5. What will be the reading on ammeter 5 if bulb 7 blows?