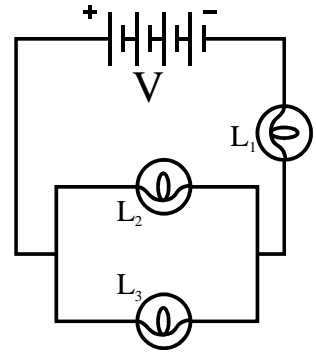


Quiz 12:2D DC Circuits – Series & Parallel [E-H]

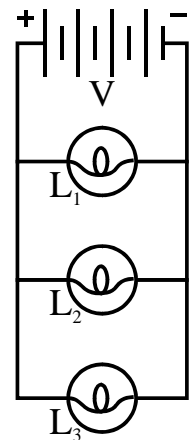
A battery V is connected in series with three different light bulbs: L_1 , L_2 , and L_3 , as shown to the right. The voltage across light bulb L_2 is 4.00 Volts and the voltage across L_1 is 2.00 Volts.



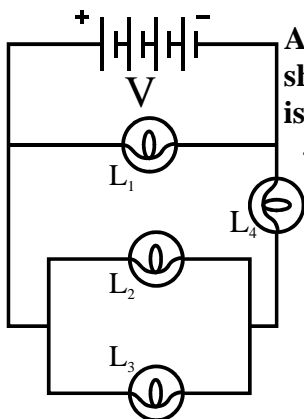
1. What will be the voltage across light bulb L_3 ? [3 pts]

2. What will be the voltage across the battery? [3 pts]

Three light bulbs are connected in parallel to a 12.0 Volt battery as shown to the right.



3. Across which light bulb will the voltage be the greatest? Explain! [3 pts]



A battery V is connected to four different light bulbs, L_1 , L_2 , L_3 and L_4 , as shown. The current through light bulb L_1 is 2.0 Amperes, through light bulb L_2 is 1.0 Amperes and through the battery is 5.0 Amperes.

4. What will be the current flowing through light bulb L_4 ? Explain! [3 pts]

5. What will be the current flowing through light bulb L_3 ? Explain! [3 pts]
