Kirchoff’s Law’s Pre-Lab

Use Kirchoff’s 2 laws to calculate the current through each resistor and its direction. Write the answer above or next to each resistor. Draw an arrow to show the current’s direction.

Figure #1

1. What will a voltmeter read when connected between points A and B?
   ________________________________________________________________

2. Describe how the current from “A” to “B” can be what it is?
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

3. Consider a converse problem; draw a simple circuit where the potential difference between two points, “C” and “D,” is zero but the current is large. Think “out of the box.”
For the circuit above calculate the current through each resistor and the current’s direction using Kirchoff’s Laws.
Kirchoff’s Law’s Pre-Lab

Draw circuit that uses 3 resistors and one 3.0 V battery that can be used to show Kirchoff’s 2 laws. Your resistors can be either 47Ω or 100 Ω values. But they cannot all three be the same value.

Solve for the voltage dropped by and the current through each resistor. Use these values to NEATLY illustrate Kirchoff’s 2 laws.