1. Fill in the table for this circuit. Show your work and then check your answer with PhET





1. A parallel circuit has 3 resistors each on different paths connected to a 120 V potential difference. The resistors have resistances of 5.0 Ω, 7.5 Ω, and 9.8 Ω?

Draw a picture of the circuit. Fill in the table for this circuit. Show your work and then check your answer with PhET.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  Add units to measurements | 5.0 Ω | 7.5 Ω | 9.8 Ω | total |
| V ( ) |  |  |  |  |
| I ( ) |  |  |  |  |
| R ( ) |  |  |  |  |
| P ( ) |  |  |  |  |

1. For both circuits: Determine the potential difference on and the current through each resistor. Show your work and then check your answer with PhET

90.0 Ω

20.0 Ω

30.0 Ω 50.0 Ω

3.0 Ω

9.0 Ω

12.0 V

6.0 Ω

1. Construct a complex circuit that will produce \_*Get value from instructor)*\_total resistance using PhET. Draw your diagram.

Use: 9 V battery , resistors: 220 KΩ, 100 KΩ, 50 KΩ, 40 KΩ, wire