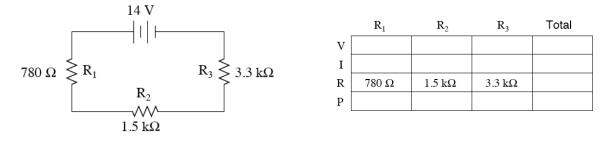
Circuit Challenge: Use PhET Circuit Construction Kit- Virtual Lab version

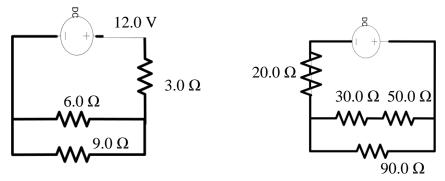
1. Fill in the table for this circuit. Show your work and then check your answer with PhET



2. A parallel circuit has 3 resistors each on different paths connected to a 120 V potential difference. The resistors have resistances of  $5.0 \Omega$ ,  $7.5 \Omega$ , and  $9.8 \Omega$ ? 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	5.0 Ω	7.5 Ω	9.8 Ω	total
measurements				
V ( )				
Ι()				
R ( )				
P()				

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



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

Use: 9 V battery , resistors: 220 K $\Omega$ , 100 K $\Omega$ , 50 K $\Omega$ , 40 K $\Omega$ , wire