Prelab_PHYS222 Series & Parallel Resistances

1. What is a series circuit?

2. What a parallel circuit?

3. Is the equivalent resistance of a parallel circuit greater or less than any of the individual resistances? Explain.

4. Calculate the equivalent resistance of the circuit in figure 19-2 (the parallel circuit)? The circuit is composed of one100 ohm resistor, one 200 ohm resistor and one 300 ohm resistor. Draw a circuit diagram and show all work.

5. An ideal ammeter has ______ resistance and does ______ affect the circuit being measured. All real ammeters have ______ resistance (*which is a function of the DMM setting*) and consequently ______ affect the circuit being measured.