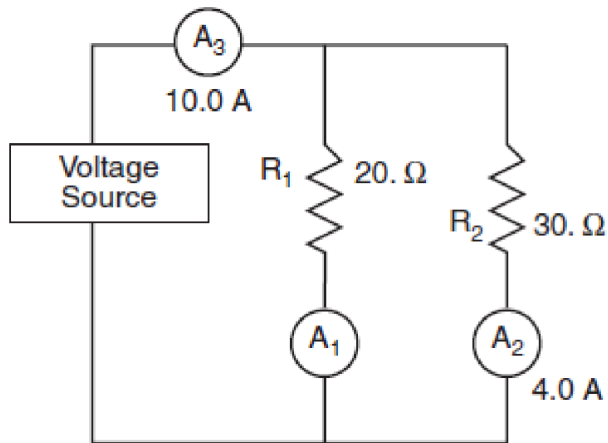


Problem set I8 – Individual Work Only

NAME:_____

Number___



Questions 1-3: The diagram above shows two parallel resistors and three ammeters connected to a battery.

- 1.** What is the current reading in the ammeter A_1 ?

Answer: _____

Justification:

- 2.** What is the voltage of the voltage source?

Answer: _____

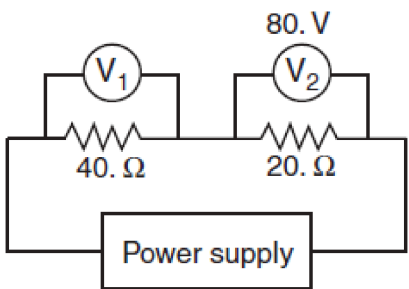
Justification:

- 3.** Which resistor takes more voltage across it?

- (A) The 20 Ω resistor
- (B) The 30 Ω resistor
- (C) Both take the same voltage

Answer: _____

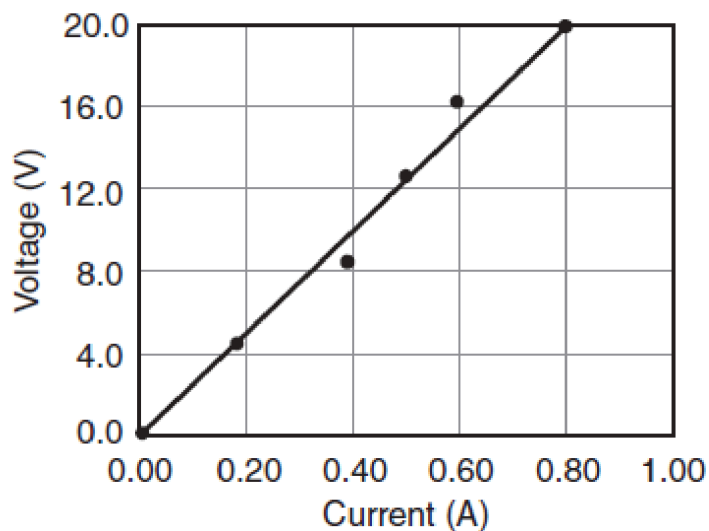
Justification:



4. In the series circuit shown above, the voltmeter V_2 reads 80 V . What is the reading of voltmeter V_1 ?
- (A) 160 V
 (B) 80 V
 (C) 40 V
 (D) 20 V

Answer: _____

Justification:



5. A resistor is connected to a battery. The battery's voltage is varied without changing the resistance. The graph of voltage vs. current is shown above. Use ohm's law with a point on the best-fit line (**not a data point**) to calculate the resistance of the resistor.

Answer: _____

Justification:

