**Warm-up:** Review parallel vs series circuits

A circuit contains two lamps, each with a measured potential difference of 4.0 V.



What is the voltage of the battery in the circuit?

* 1. 16.0 V
	2. 8.0 V
	3. 1.0 V
	4. 4.0 V

A circuit contains two lamps, a battery, and three ammeters.



Based on the readings on two of the ammeters, what is the reading on the third ammeter?

* 1. 2.0 A
	2. 4.0 A
	3. 1.0 A
	4. 3.0 A

Three lamps are connected in a circuit in parallel with a 9.0 V battery.



What will be the measured potential difference across each of the three bulbs?

* 1. 9.0 V
	2. 3.0 V
	3. 1.0 V
	4. 4.5 V

Which of the following statements regarding current in circuits is true?

* 1. The total current in a parallel circuit must always equal the voltage in the circuit
	2. The current in a series circuit varies from component to component
	3. The current at all points in a series circuit is the same
	4. The current at all points in a parallel circuit is the same

Which of the following circuits containing three equal value resistors would result in the greatest total circuit resistance?



* 1. Circuit W
	2. Circuit X
	3. Circuit Z
	4. Circuit Y