

Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

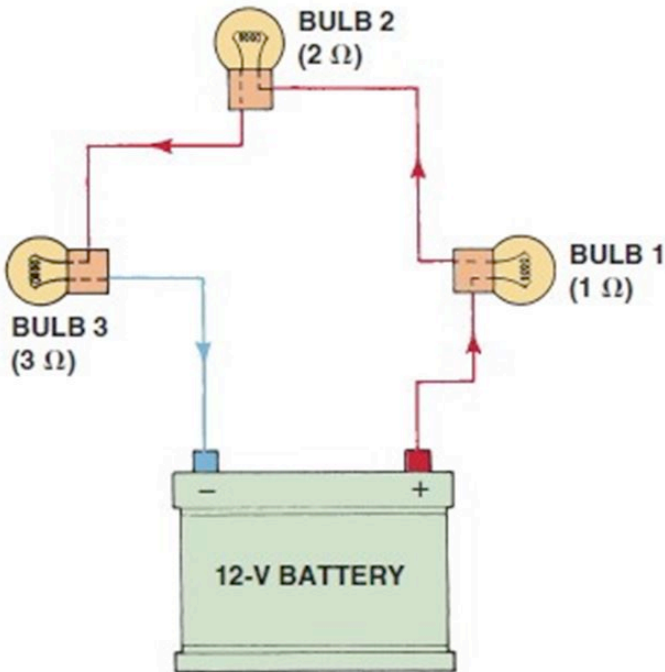
1) Technician A says that Ohm's law can be used to determine circuit current flow if total circuit resistance and total voltage are known. Technician B says that Ohm's law can be used to calculate the unknown resistance of a load in a circuit if total current and source voltage are known. Which technician is correct? 1) _____

- A) Technician A only
- B) Technician B only
- C) Both technicians
- D) Neither technician

2) If resistance is reduced in a series circuit, _____ current will flow. 2) _____

- A) More
- B) Less
- C) The same
- D) None of these

3) How much current will flow in this circuit? 3) _____

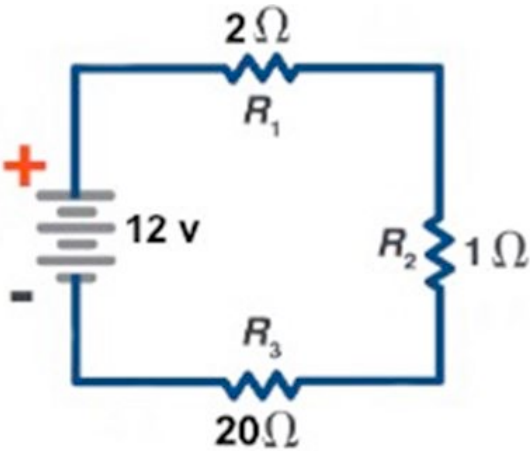


- A) 2 amps
- B) 12 amps
- C) 3 amps
- D) None of these

- 4) In a series circuit with one light bulb operating at 12 volts, the current flow is measured to be 240 milliamps (mA). What is the resistance of the bulb? 4) _____
- A) 50 Ω
 - B) 20 Ω
 - C) 0.05 Ω
 - D) Not enough information
- 5) The sum of the voltage drops in a series circuit equals the _____. 5) _____
- A) Amperage
 - B) Resistance
 - C) Source voltage
 - D) Wattage
- 6) In a series circuit, total circuit resistance is equal to the _____ of the resistance of all loads in the circuit. 6) _____
- A) Sum
 - B) Difference
 - C) Dividend
 - D) None of these
- 7) A series circuit has three resistors of 4 ohms each. The voltage drop across each resistor is 4 volts. Technician A says that the source voltage is 12 volts. Technician B says that the total resistance is 18 ohms. Which technician is correct? 7) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 8) In a series circuit, _____. 8) _____
- A) Total circuit resistance is equal to the sum of all resistances in the circuit
 - B) Current flow is the same at any point in the circuit
 - C) Both A and B
 - D) Neither A nor B
- 9) Three light bulbs are wired in series. A fourth bulb is connected to the circuit in series. Technician A says that the total voltage drop will increase. Technician B says that the current (amperes) will decrease. Which technician is correct? 9) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician

10) How much current will flow in this circuit?

10) _____



- A) 2 A
- B) 6 A
- C) 0.5 A
- D) 3 A

Answer Key

Testname: AEE6_6A

1) C

Page Ref: 72

2) A

Page Ref: 72-73

3) A

Page Ref: 73

4) A

Page Ref: 72

5) C

Page Ref: 74

6) A

Page Ref: 72

7) A

Page Ref: 74

8) C

Page Ref: 75

9) B

Page Ref: 76

10) C

Page Ref: 77