

Name: _____

Date: _____

1. What is the total resistance of a parallel circuit with three resistors of 4, 8, and 16 ohms?
 - A. 27 ohms
 - B. 14 ohms
 - C. 4 ohms
 - D. 2.3 ohms

2. In a series circuit with three bulbs, how is the total resistance determined?
 - A. By subtracting the resistances of the bulbs
 - B. By adding the resistances of the bulbs
 - C. By multiplying the resistances of the bulbs
 - D. By dividing the resistances of the bulbs

3. Which of the following is NOT a type of circuit discussed in the chapter?
 - A. Series circuit
 - B. Parallel circuit
 - C. Series-parallel circuit
 - D. Tri-series circuit

4. What is the primary purpose of fuses in a series circuit?
 - A. To increase voltage
 - B. To decrease resistance
 - C. To prevent possible overheating damage in the event of a short circuit
 - D. To amplify the current

5. In a series circuit, if 2 amperes of current leave the battery, how many amperes of current return to the battery?
 - A. 0 amperes
 - B. 1 ampere
 - C. 2 amperes
 - D. 4 amperes

6. In a parallel circuit, what happens to the voltage across each resistance?
 - A. It drops
 - B. It increases
 - C. It decreases
 - D. It remains constant

7. Which of the following is NOT a characteristic of a series circuit?
 - A. All current flows through all resistances
 - B. The total resistance is the sum of the individual resistances
 - C. The voltage drops across each resistance in the circuit
 - D. The current varies across each resistance in the circuit

8. What is the term used for circuits that have both series and parallel configurations?

- A. Compound circuit
- B. Combination circuit
- C. Series-parallel circuit
- D. Dual circuit

9. In a parallel circuit, what determines the amount of current flow through the branches?

- A. The resistance and the applied voltage according to Ohm's law
- B. The total voltage of the circuit
- C. The number of branches in the circuit
- D. The length of the wires in the circuit

10. In a parallel circuit, if there is more than one path for the current to flow, most of the current will flow through the branch with the _____.

- A. Highest resistance
- B. Lowest resistance
- C. Highest voltage
- D. Lowest voltage

Automotive Technology 7th Edition

Chapter 38

Multiple Choice Quiz B

Answer Key

1. D

2. B

3. D

4. C

5. C

6. A

7. D

8. C

9. A

10. B