EET1033 H-3 Series Cts

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. In a series circuit, the ____ is the same at any point in the circuit.
a. amperage
b. resistance
c. voltage
d. wattage

____ 2. ____ indicates the amount of voltage necessary to push the current through the limiting element.
a. Voltage polarity
b. Voltage drop
c. Series resistance
d. Resistance adds

____ 3. The amount of voltage required to push the electrons through the circuit is determined by the amount of ____.
a. amperage
b. resistance
c. wattage
d. a and b

____ 4. The total amount of resistance to current flow in a series circuit is equal to the sum of the ____ in that circuit.
a. amperages
b. resistances
c. voltages
d. wattages

____ 5. If a series circuit has three resistors and two amps flow through each resistor, the total amperage for the circuit is ____ amps.
a. 0
b. 2
c. 4
d. 8

____ 6. In which of the following types of circuits can the total power of the circuit be determined by adding the power dissipation of all the parts of the circuit?
a. series
b. parallel
c. combination
d. all of the above

____ 7. ____ are used to provide different voltages between certain points of a circuit.
a. Voltage multipliers
b. Voltage adders
c. Voltage dividers
d. Resistance adders

____ 8. According to the general voltage divider formula, the voltage drop across any particular resistance is equal to the total circuit current ____ the value of that resistor.
a. plus
b. minus
c. times
d. divided by

____ 9. In voltage divider circuits, ____ is often used to provide a common reference point to produce voltages that are above or below ground.
a. amperage
b. ground
c. resistance
d. power

Completion
Complete each statement.

10. A _____ circuit is a circuit that has only one path for the current to flow.

11. _____ is the force that pushes the electrons through a resistance.

12. In a series circuit, the sum of all the voltage drops across all the resistors must be equal to the _____ applied to the circuit.

13. The definition of _____ is that the total resistance of a circuit can be found by adding the values of all the resistors in that circuit.

14. Given the voltage and the resistance, the amount of current flow in a circuit can be determined by using _____.

15. Using Ohm's law, it would take _____ volts to push 4 amps of current through 20 ohms of resistance.