

EET1033 H-4 Parallel Cts

Multiple Choice

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

- ___ 1. A ___ circuit is the conductors that supply power to electrical equipment from the last overcurrent protective device (fuse or circuit breaker).
- a. branch
 - b. feeder
 - c. parallel
 - d. series
- ___ 2. ___ is the amount of power a circuit is supplying to an electrical device.
- a. Amperage
 - b. Load
 - c. Resistance
 - d. Voltage
- ___ 3. The ___ across any branch of a parallel circuit is the same as the applied voltage.
- a. amperage
 - b. resistance
 - c. voltage drop
 - d. wattage
- ___ 4. The total resistance of a ___ circuit is always less than the resistance of the lowest value resistor in the circuit.
- a. combination
 - b. parallel
 - c. series
- ___ 5. According to Ohm's law, an increase of resistance must cause a proportional decrease of ___.
- a. voltage
 - b. wattage
 - c. resistance
 - d. current
- ___ 6. In parallel circuits, when all resistors are of equal value the total resistance is equal to the value of one individual resistor ___.
- a. multiplied by the number of resistors
 - b. divided by the number of resistors
 - c. multiplied by the voltage
 - d. divided by the voltage
- ___ 7. When using the product over sum method of determining the total resistance of a parallel circuit, you would ___.
- a. multiply the total of R(1) times R(2) by the total of R(1) plus R(2)
 - b. multiply the total of R(1) plus R(2) by the total of R(1) times R(2)
 - c. divide the total of R(1) times R(2) by the total of R(1) plus R(2)
 - d. divide the total of R(1) plus R(2) by the total of R(1) times R(2)
- ___ 8. The reciprocal of any number is that number divided ___.
- a. by 1
 - b. into 1
 - c. into 10
 - d. by 10
- ___ 9. The total amount of power in a ___ circuit is equal to the sum of the power used by all the parts.
- a. series
 - b. parallel
 - c. combination
 - d. any of the above
- ___ 10. In a parallel circuit, the amount of current flowing through each resistor is inversely proportional to its ___.
- a. amperage
 - b. current
 - c. resistance
 - d. wattage
- ___ 11. In parallel circuits, the voltage across each branch of the circuit is ___.

- a. dependent on the value of the branch resistor
- b. dependent on the total current
- c. always equal
- d. none of the above

_____ 12. If four resistors, each with a value of 100 ohms, are connected in parallel, the total resistance of the circuit is _____ ohms.

- a. 400
- b. 100
- c. 50
- d. 25

_____ 13. Three resistors, with values of 10 ohms, 20 ohms, and 30 ohms, are connected in parallel and the circuit has a voltage of 120 volts with an amperage of 2.5 amps. The total current of the 20-ohm branch is _____ amps.

- a. 2.5
- b. 6
- c. 50
- d. 60

_____ 14. If a parallel circuit has two resistors with values of 10 ohms and 25 ohms, the total resistance of the circuit is _____ ohms.

- a. 250
- b. 35
- c. 7.14
- d. .14

_____ 15. The amount of current leaving the source _____.

- a. is always less than the current returning to the source
- b. is always more than the current returning to the source
- c. must equal the current returning to the source
- d. varies with the value of the resistance in the circuit