|  |  |  |
| --- | --- | --- |
| **Question 1**Correct on previous attempt(s) |  | 1 / 1 point |

A series circuit consists of three resistors with values of 1.1 kΩ, 4.4 kΩ, and 2.5 kΩ across a 30 V source. The current through the 2.5 kΩ resistor is

|  |  |  |  |
| --- | --- | --- | --- |
|  | 2.24 mA | | |
|  | 3.75 A | | |
|  | 3.75 mA | | |
|  | 2.24 μA | | |
| **Question 2**Correct on previous attempt(s) | |  | 1 / 1 point | |

When a 24-volt battery is connected to a series circuit with three resistors of 1 ohm, 3 ohms, and 2 ohms, how many amperes of current will flow through the circuit?

|  |  |  |  |
| --- | --- | --- | --- |
|  | 4 | | |
|  | 3 | | |
|  | 1 | | |
|  | 2 | | |
| **Question 3**Correct on previous attempt(s) | |  | 1 / 1 point | |

kilo (k) means which of these?

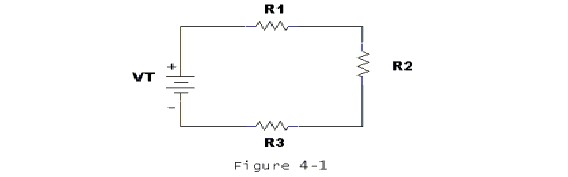
|  |  |  |  |
| --- | --- | --- | --- |
|  | 10-3 | | |
|  | 1 | | |
|  | 103 | | |
|  | 100 | | |
| **Question 4**Correct on previous attempt(s) | |  | 1 / 1 point | |

When the resistance and voltage are known, what is the formula for finding the current (amperes)?

|  |  |  |  |
| --- | --- | --- | --- |
|  | I = R/V | | |
|  | I = V x R | | |
|  | I = V x R | | |
|  | I = V/R | | |
| **Question 5**Correct on previous attempt(s) | |  | 1 / 1 point | |

The formula for total resistance (RT) in a series circuit is which of these?

|  |  |  |  |
| --- | --- | --- | --- |
|  | *R*T = *R*1 + *R*2 + *R*3 | | |
|  | *R*T = *R*1 - *R*2 | | |
|  | *R*T = *R*1 X *R*2 X *R*3 | | |
|  | *R*T = | | |
| **Question 6**Correct on previous attempt(s) | |  | 1 / 1 point | |

  
  
How much voltage is dropped across R2 and R3 in Figure 4-1 if R1 = 4.7 kΩ, VR1 = 10 V, R2 = 4.7 kΩ and R3 = 4.7 kΩ?

|  |  |  |  |
| --- | --- | --- | --- |
|  | VR2 = 4.7 V, VR3 = 10 V | | |
|  | VR2 = 10 V, VR3 = 4.7 V | | |
|  | VR2 = 10 V, VR3 = 10 V | | |
|  | VR2 = 14.7 V, VR3 = 14.7 V | | |
| **Question 7**Correct on previous attempt(s) | |  | 1 / 1 point | |

The sum of the voltage drops in a series circuit equals the:

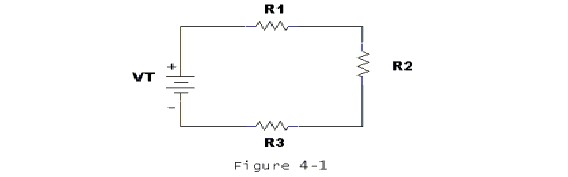
|  |  |  |  |
| --- | --- | --- | --- |
|  | Total resistance | | |
|  | Current in circuit | | |
|  | Source voltage | | |
|  | Resistance in branch | | |
| **Question 8**Correct on previous attempt(s) | |  | 1 / 1 point | |

milli (m) means which of these?

|  |  |  |  |
| --- | --- | --- | --- |
|  | 1 | | |
|  | 100 | | |
|  | 10-3 | | |
|  | 103 | | |
| **Question 9**Retaken | |  | 1 / 1 point | |

A 4.7 kΩ resistor has 3 mA of current passing through it. The resistor dissipates

|  |  |  |  |
| --- | --- | --- | --- |
|  | 35.2 mW | | |
|  | 42.3 W | | |
|  | 42.3 mW | | |
|  | 14.1 mW | | |
| **Question 10**Correct on previous attempt(s) | |  | 1 / 1 point | |

  
  
What is the total resistance in Figure 4-1 if R1 = 10 kΩ, R2 = 10 kΩ and R3 = 10 kΩ?

|  |  |  |  |
| --- | --- | --- | --- |
|  | | | 30 kΩ |
|  | | | infinite Ω |
|  | | | 0 kΩ |
|  | | | 3.3 kΩ |
|  |  |
|  | |