Circuit Test Review

ⓘ This is a preview of the published version of the quiz

Started: Apr 16 at 3:14pm

Quiz Instructions

Question 1 — 1 pts

A 28 Volt battery is connected in series with a 6 Ohm resistor and then in parallel with two resistors on separate paths one with 10 Ohms and the other with 5 Ohms of resistance.

What is the voltage drop across the 6 Ohm resistor? Volts

Question 2 — 1 pts

A 28 Volt battery is connected in series with a 6 Ohm resistor and then in parallel with two resistors on separate paths one with 10 Ohms and the other with 5 Ohms of resistance.

What is the current passing through the 5 Ohm resistor? Amps

Question 3 — 1 pts

A 28 Volt battery is connected in series with a 6 Ohm resistor and then in parallel with two resistors on separate paths one with 10 Ohms and the other with 5 Ohms of resistance.

What is the power output of the 10 Ohm resistor? Watts

Question 4

1 pts

A 28 Volt battery is connected in series with a 6 Ohm resistor and then in parallel with two resistors on separate paths one with 10 Ohms and the other with 5 Ohms of resistance.

What is the current through the 6 Ohm resistor? Amps

Question 5

1 pts

A 28 Volt battery is connected in series with a 6 Ohm resistor and then in parallel with two resistors on separate paths one with 10 Ohms and the other with 5 Ohms of resistance.

What is the power output of the 5 Ohm resistor? Watts

Question 6

1 pts

A 28 Volt battery is connected in series with a 6 Ohm resistor and then in parallel with two resistors on separate paths one with 10 Ohms and the other with 5 Ohms of resistance.

What is the power output of the battery? Watts

Question 7

1 pts

A 28 Volt battery is connected in series with a 6 Ohm resistor and then in parallel with two resistors on separate paths one with 10 Ohms and the other with 5 Ohms of resistance.

What is the current through the battery? Amps

Question 8

1 pts

A 28 Volt battery is connected in series with a 6 Ohm resistor and then in parallel with two resistors on separate paths one with 10 Ohms and the other with 5 Ohms of resistance.

What is the total equivalent resistance of the entire circuit? Ohms

Question 9

1 pts

A 160 Volt battery is connected to three 10 Ohm resistors in series and then two resistors each with 100 Ohm resistances on separate parallel paths.

What is the total equivalent resistance of the entire circuit? Ohms

Question 10

1 pts

A 160 Volt battery is connected to three 10 Ohm resistors in series and then two resistors each with 100 Ohm resistances on separate parallel paths.

What is the current through the battery? Amps

Question 11

1 pts

A 160 Volt battery is connected to three 10 Ohm resistors in series and then two resistors each with 100 Ohm resistances on separate parallel paths.

What is the power output of the battery in Watts?

Question 12

1 pts

A heater draws 2000 Watts of power in 10 seconds. How many joules of heat result? Joules

Question 13

1 pts

The power dissipated by a resistor is 16 Watts. How many joules of heat result? Joules

Question 14 — 1 pts

Ammeters have high resistances.

- True
- False

Question 15 — 1 pts

Voltmeters have low resistances.

- True
- False

Question 16 — 1 pts

Voltage can be referred to as potential difference.

- True
- False

Question 17 — 1 pts

Series circuits allow for more than one path for electrons to flow through a circuit.

- True
- False

Question 18 1 pts

Ammeters are placed in series.

- True
- False

Question 19 1 pts

Voltmeters are placed in parallel.

- True
- False

Question 20 1 pts

A 12 Volt battery is connected to three resistors in series with resistances 3, 7, and 2 Ohms. What is the total equivalent resistance of the circuit? Ohms

Question 21 1 pts

A 12 Volt battery is connected to three resistors in series with resistances 3, 7, and 2 Ohms.

What is the current through the 2 Ohm resistor? Amps

Question 22

1 pts

A 12 Volt battery is connected to three resistors in series with resistances 3, 7, and 2 Ohms.

What is the current through the battery? Amps

Question 23

1 pts

A 12 Volt battery is connected to three resistors in series with resistances 3, 7, and 2 Ohms. What is the voltage drop across the 3 Ohm resistor? Volts

Question 24

1 pts

A 12 Volt battery is connected to three resistors in series with resistances 3, 7, and 2 Ohms. What is the power output of the 3 Ohm resistor? Watts

Question 25

1 pts

A 12 Volt battery is connected to three resistors in series with resistances 3, 7, and 2 Ohms. What is the current through the 7 Ohm resistor? Amps

Question 26

1 pts

A 12 Volt battery is connected to three resistors in series with resistances 3, 7, and 2 Ohms. What is the voltage drop across the 7 Ohm resistor? Volts

Question 27

1 pts

A 12 Volt battery is connected to three resistors in series with resistances 3, 7, and 2 Ohms. What is the total power output of the battery? Watts

Question 28

1 pts

A 15 Volt battery is connected in parallel to three resistors (each on their own path) with values 5, 5, and 10 Ohms. What is the total equivalent resistance of the circuit? Ohms

Question 29

1 pts

A 15 Volt battery is connected in parallel to three resistors (each on their own path) with values 5, 5, and 10 Ohms. What is the current through the battery? Amps

Question 30

1 pts

A 15 Volt battery is connected in parallel to three resistors (each on their own path) with values 5, 5, and 10 Ohms. What is the voltage drop across the 10 Ohm resistor? Volts

Question 31

1 pts

A 15 Volt battery is connected in parallel to three resistors (each on their own path) with values 5, 5, and 10 Ohms. What is the current through each of the 5 Ohm resistors? Amps

Question 32

1 pts

A 15 Volt battery is connected in parallel to three resistors (each on their own path) with values 5, 5, and 10 Ohms. What is the current through the 10 Ohm resistor? Amps

Question 33

1 pts

A 15 Volt battery is connected in parallel to three resistors (each on their own path) with values 5, 5, and 10 Ohms. What is the power output of the 10 ohm resistor? Watts

Question 34

1 pts

A 15 Volt battery is connected in parallel to three resistors (each on their own path) with values 5, 5, and 10 Ohms. What is the power output of the battery? Watts

Question 35

1 pts

A resistor experiences a 3A current and a 4V voltage drop. What is the power output of the resistor? Watts

Question 36

1 pts

As parallel paths are added to a circuit, the total current through the battery _____.

- increases
- remains the same

- decreases

Question 37 — 1 pts

Adding more resistors to a circuit always increases the resistance.

- True
- False

Question 38 — 1 pts

Adding resistors in parallel to a circuit will _____ the overall resistance.

- decrease
- increase
- not affect

Question 39 — 1 pts

Adding resistors in series to a circuit will _____ the overall resistance.

- decrease
- not affect
- increase

Question 40 — 1 pts

Adding resistors in parallel to a circuit will _____ the total current through the battery.

- increase
- not affect
- decrease

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