## **Technician Question Pool July 2022 to June 2026**

#### **The MORE Project**

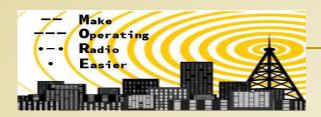
http://n2re.org/m-o-r-e-project



# **Electrical Principles No-Nonsense page 16 - 17**

#### **DC Power**

Power is the rate at which electrical energy is generated or consumed.
Power is measured in watts (W).
Current is measured in amperes (A).
We use the letter P to stand for power, the letter I to stand for current, and the letter E to stand for voltage.
The power formula is: P = E x I
The current formula is: I = P / E



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Which term describes the rate at which electrical energy is used?

A. ResistanceB. CurrentC. PowerD. Voltage



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EP4 Q1 of 6

Which term describes the rate at which electrical energy is used?

A. Resistance
B. Current
C. Power
D. Voltage



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EP4 A1 of 6

Electrical power is measured in which of the following units?

A. VoltsB. WattsC. Watt-hoursD. Amperes



FCC Tech 7/22 to 6/26 DC Power

EP4 Q2 of 6

Electrical power is measured in which of the following units?

A. Volts**B. Watts**C. Watt-hoursD. Amperes



FCC Tech 7/22 to 6/26 DC Power EP4 A2 of 6

What is the formula used to calculate electrical power (P) in a DC circuit?

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A. P = E x I
B. P = E / I
C. P = E - I
D. P = E + I
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FCC Tech 7/22 to 6/26 DC Power EP4 Q3 of 6

What is the formula used to calculate electrical power (P) in a DC circuit?

A. P = E x I B. P = E / I C. P = E - I D. P = E + I



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How much power is delivered by a voltage of 13.8 volts DC and a current of 10 amperes?

A. 138 wattsB. 0.7 wattsC. 23.8 wattsD. 3.8 watts



FCC Tech 7/22 to 6/26 DC Power

EP4 Q4 of 6

How much power is delivered by a voltage of 13.8 volts DC and a current of 10 amperes?

# A. 138 watts B. 0.7 watts C. 23.8 watts D. 3.8 watts



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FP4 A4 of 6

How much power is delivered by a voltage of 12 volts DC and a current of 2.5 amperes?

A. 4.8 wattsB. 30 wattsC. 14.5 wattsD. 0.208 watts



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EP4 Q5 of 6

How much power is delivered by a voltage of 12 volts DC and a current of 2.5 amperes?

A. 4.8 watts
B. 30 watts
C. 14.5 watts
D. 0.208 watts



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EP4 A5 of 6

How much current is required to deliver 120 watts at a voltage of 12 volts DC?

- A. 0.1 amperes B. 10 amperes C. 12 amperes
- D. 132 amperes



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EP4 Q6 of 6

How much current is required to deliver 120 watts at a voltage of 12 volts DC?

A. 0.1 amperesB. 10 amperesC. 12 amperesD. 132 amperes



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A non-profit initiative by the IEEE and ARDC to increase the numbers of youth (12-18) and non-males in Amateur Radio. Participants earn FCC licenses and receive free 2-way radios.

For MORE information: n2re.org/m-o-r-e-project Dr. Rebecca Mercuri, Grant Administrator, rtmercuri@ieee.org

