MARYLAND PHYSICS · MARYLAND

Maryland Physics
Practice Test

Unit 3: Electricity, Magnetism, and Waves

10 Questions

Original practice test based on the Maryland curriculum. Work through each question, then check your answers at the end.

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

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Question 1

A magnet has two poles, called

A) positive and negative

B) east and west

C) up and down

D) north and south

Understand It with Pulse

Flag a mistake

Question 2

The current through a 12 ohm resistor at 36 V, in amperes, is ____

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Flag a mistake

Question 3

A current of 5 A flows for 6 s. The charge transferred, in coulombs, is ____

Understand It with Pulse

Flag a mistake

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Question 4

A wave has period 0.25 s. Its frequency, in hertz, is ____

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Question 5

In a longitudinal wave, particles of the medium move

A) perpendicular to the wave direction

B) parallel to the wave direction

C) only at the source

D) not at all

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Question 6

Sound cannot travel through a vacuum because sound needs a

A) light source

B) magnetic field

C) wire

D) medium

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Question 7

If one branch of a parallel circuit breaks, the other branches

A) all stop

B) keep working

C) reverse current

D) double their voltage

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Question 8

A transformer works only with

A) direct current

B) static charge

C) no current

D) alternating current

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Question 9

A device uses current 4 A at voltage 5 V. Its power, in watts, is ____

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Question 10

Two resistors of 8 ohms and 2 ohms in series have total resistance, in ohms, of ____

Understand It with Pulse | Flag a mistake

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ANSWER KEY

1. D
2. 3
3. 30
4. 4
5. B
6. D
7. B
8. D
9. 20
10. 10

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