SOUTH DAKOTA PHYSICS · UNIT 3

Electricity, Magnetism, and Waves — Practice Test

South Dakota Physics • 10 questions

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.

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

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

ANSWER _____

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **A wave has period 0.25 s. Its frequency, in hertz, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

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

Understand It with Pulse | Flag a mistake

6 **Sound cannot travel through a vacuum because sound needs a**

A light source

B magnetic field

C wire

D medium

Understand It with Pulse | Flag a mistake

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

Understand It with Pulse | Flag a mistake

8 **A transformer works only with**

A direct current

B static charge

C no current

D alternating current

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.