CALIFORNIA PHYSICS · UNIT 4 · 10 QUESTIONS

Waves, Light, and Sound — Practice Test

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 ray hits a mirror at 25 degrees to the normal. What is the angle between the incoming ray and the reflected ray?**

- A 25 degrees
- B 50 degrees
- C 12.5 degrees
- D 65 degrees

Understand It with Pulse | Flag a mistake

2 **The distance between two successive crests is the**

- A period
- B frequency
- C amplitude
- D wavelength

Understand It with Pulse | Flag a mistake

3 **Two waves meet crest to trough with equal amplitude. The result is**

A reflection

B destructive interference

C constructive interference

D refraction

Understand It with Pulse | Flag a mistake

4 **A wave has frequency 6 Hz and wavelength 7 m. Its speed, in meters per second, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A wave travels at 120 m/s with frequency 40 Hz. Its wavelength, in meters, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **Sound at 340 m/s takes 1 s for a round trip. The distance to the surface, in meters, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **In a vacuum, all electromagnetic waves travel at**

A the same speed

B the speed of sound

C zero

D different speeds by color

Understand It with Pulse | Flag a mistake

9 **White light through a prism spreads because different colors are**

- A refracted by different amounts
- B blocked
- C reflected equally
- D absorbed equally

Understand It with Pulse | Flag a mistake

10 **A plane mirror forms an image that is**

- A virtual and magnified always
- B real and inverted
- C virtual and upright
- D real and upright

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	A	**5.**	4	**9.**	A
2.	D	**6.**	3	**10.**	C
3.	B	**7.**	170		
4.	42	**8.**	A		

© 2026 Brett Robbins. All Rights Reserved.