NEWFOUNDLAND AND LABRADOR PHYSICS 2204 · UNIT D · 25 QUESTIONS

Waves — 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 wave has frequency 5 Hz and wavelength 2 m. Its speed, in metres per second, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A wave has frequency 10 Hz. Its period, in seconds, is**

ANSWER _____

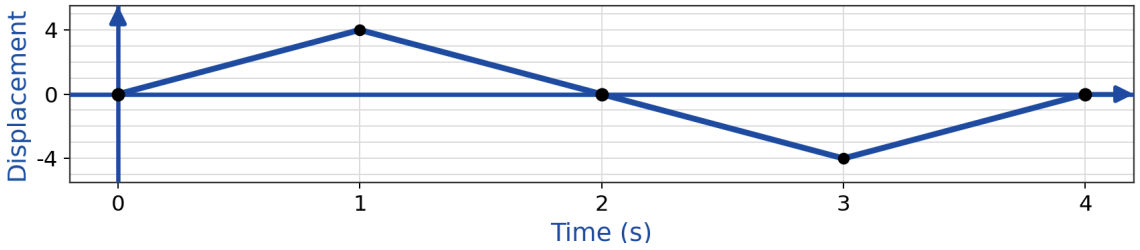
Understand It with Pulse | Flag a mistake

3 **A sound wave travels at 200 m per second with frequency 50 Hz. Its wavelength, in metres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **The graph shows a wave. Its amplitude is**



A 2

B 8

C 1

D 4

Understand It with Pulse | Flag a mistake

5 **Consider the meaning of the term. The amplitude of a wave is**



A its maximum displacement from equilibrium

B the distance between crests

C the number of waves per second

D its speed

Understand It with Pulse | Flag a mistake

6 **Review the key idea. The wavelength of a wave is**



A its maximum displacement

B the distance between two adjacent crests

C the time for one wave

D its frequency

Understand It with Pulse | Flag a mistake

7

Check the definition first. Sound waves are



A transverse waves

B surface waves only

C longitudinal waves

D electromagnetic waves

Understand It with Pulse

Flag a mistake

8 **Start from the definition. Refraction is**



A the bouncing of a wave off a surface

B the spreading of a wave through a gap

C the overlapping of two waves

D the bending of a wave at a boundary between media

Understand It with Pulse | Flag a mistake

9

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

ANSWER

Understand It with Pulse | Flag a mistake

10 **Use what the term means. Diffraction is**



A the reflection of a wave

B the spreading of a wave through a gap or around an edge

C the absorption of a wave

D the doubling of frequency

Understand It with Pulse | Flag a mistake

11 **Two sounds of frequencies 300 Hz and 308 Hz are played together. The beat frequency, in hertz, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **Recall the rule. As a sound source approaches an observer, the observed pitch generally**

A decreases

B stays the same

C becomes zero

D increases

Understand It with Pulse | Flag a mistake

13 **Apply the rule. Electromagnetic waves differ from sound waves because they**



A can travel through a vacuum

B need air to travel

C are always longitudinal

D travel slower than sound in air

Understand It with Pulse | Flag a mistake

14 **A source produces 30 waves in 6 s. Its frequency, in hertz, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **A wave has frequency 4 Hz and wavelength 5 m. Its speed, in metres per second, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

16 **A wave has frequency 20 Hz. Its period, in seconds, is**

ANSWER _____

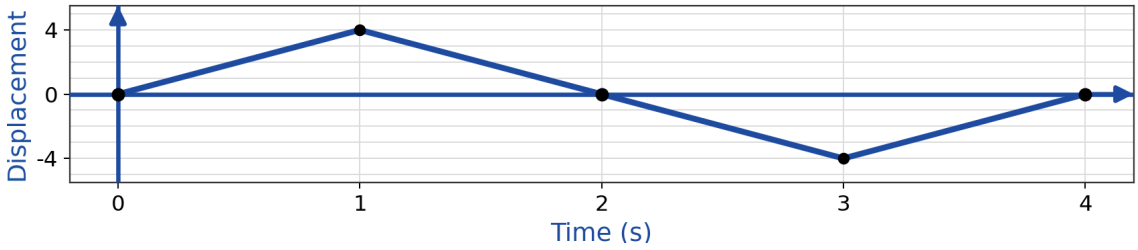
Understand It with Pulse | Flag a mistake

17 **A sound wave travels at 340 m per second with frequency 170 Hz. Its wavelength, in metres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **Apply the concept. The graph shows a wave. Its amplitude is**



- **A** 2
- **B** 4
- **C** 8
- **D** 1

Understand It with Pulse | Flag a mistake

19 **Consider the concept in general. The amplitude of a wave is**

- **A** the distance between crests
- **B** the number of waves per second
- **C** its maximum displacement from equilibrium
- **D** its speed

Understand It with Pulse | Flag a mistake

20 **Review the concept. The wavelength of a wave is**

A its maximum displacement

B the time for one wave

C its frequency

D the distance between two adjacent crests

Understand It with Pulse | Flag a mistake

21 **Think about the principle. Sound waves are**

A longitudinal waves

B transverse waves

C surface waves only

D electromagnetic waves

Understand It with Pulse | Flag a mistake

22 **Recall the principle. Refraction is**

A the bouncing of a wave off a surface

B the bending of a wave at a boundary between media

C the spreading of a wave through a gap

D the overlapping of two waves

Understand It with Pulse | Flag a mistake

23 **A wave has period 0.20 s. Its frequency, in hertz, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **Consider the principle in general. Diffraction is**

- **A** the reflection of a wave
- **B** the absorption of a wave
- **C** the doubling of frequency
- **D** the spreading of a wave through a gap or around an edge

Understand It with Pulse | Flag a mistake

25 **Two sounds of frequencies 440 Hz and 444 Hz are played together. The beat frequency, in hertz, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 10
2. 0.1
3. 4
4. D
5. A
6. B
7. C
8. D
9. 4
10. B
11. 8
12. D
13. A
14. 5
15. 20
16. 0.05
17. 2
18. B
19. C
20. D
21. A
22. B
23. 5
24. D
25. 4

© 2026 Brett Robbins. All Rights Reserved.