ONTARIO PHYSICS, GRADE 12, UNIVERSITY PREPARATION (SPH4U) · UNIT D

The Wave Nature of Light and Revolutions in Modern Physics — Practice Test

Ontario Physics, Grade 12, University Preparation (SPH4U) • 5 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 **Constructive interference occurs when path difference is a whole number of**

A Wavelengths

B Amplitudes

C Speeds

D Frequencies

Understand It with Pulse | Flag a mistake

2 **Destructive interference occurs when path difference is a half integer number of**

A Periods

B Wavelengths

C Amplitudes

D Frequencies

Understand It with Pulse | Flag a mistake

3 **Thin film interference colours arise from interference between light reflected from the top and bottom surfaces of a**

A Thin film

B Prism

C Mirror

D Lens

Understand It with Pulse | Flag a mistake

4 **A soap bubble shows colours because film thickness varies and different wavelengths interfere**

- A Not at all
- B Only in red
- C Destructively everywhere
- D Constructively at different places

Understand It with Pulse | Flag a mistake

5 **The work function of a metal is the minimum energy needed to**

- A Remove an electron from the surface
- B Heat the metal
- C Reflect a photon
- D Ionize an atom

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. A
2. B
3. A
4. D
5. A

© 2026 Brett Robbins. All Rights Reserved.