NOVA SCOTIA ADVANCED PHYSICS 12 · UNIT C · 10 QUESTIONS

Simple Harmonic Motion — 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 **An oscillator has amplitude 2 metres and angular frequency 2 radians per second. Its maximum speed, in metres per second, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **An oscillator has amplitude 0.4 metres and angular frequency 5 radians per second. Its maximum acceleration, in metres per second squared, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **An oscillator has amplitude 2 metres and angular frequency 2 radians per second. Its maximum acceleration, in metres per second squared, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **An oscillator has angular frequency 5 times pi radians per second. Its period, in seconds, is**

ANSWER _____

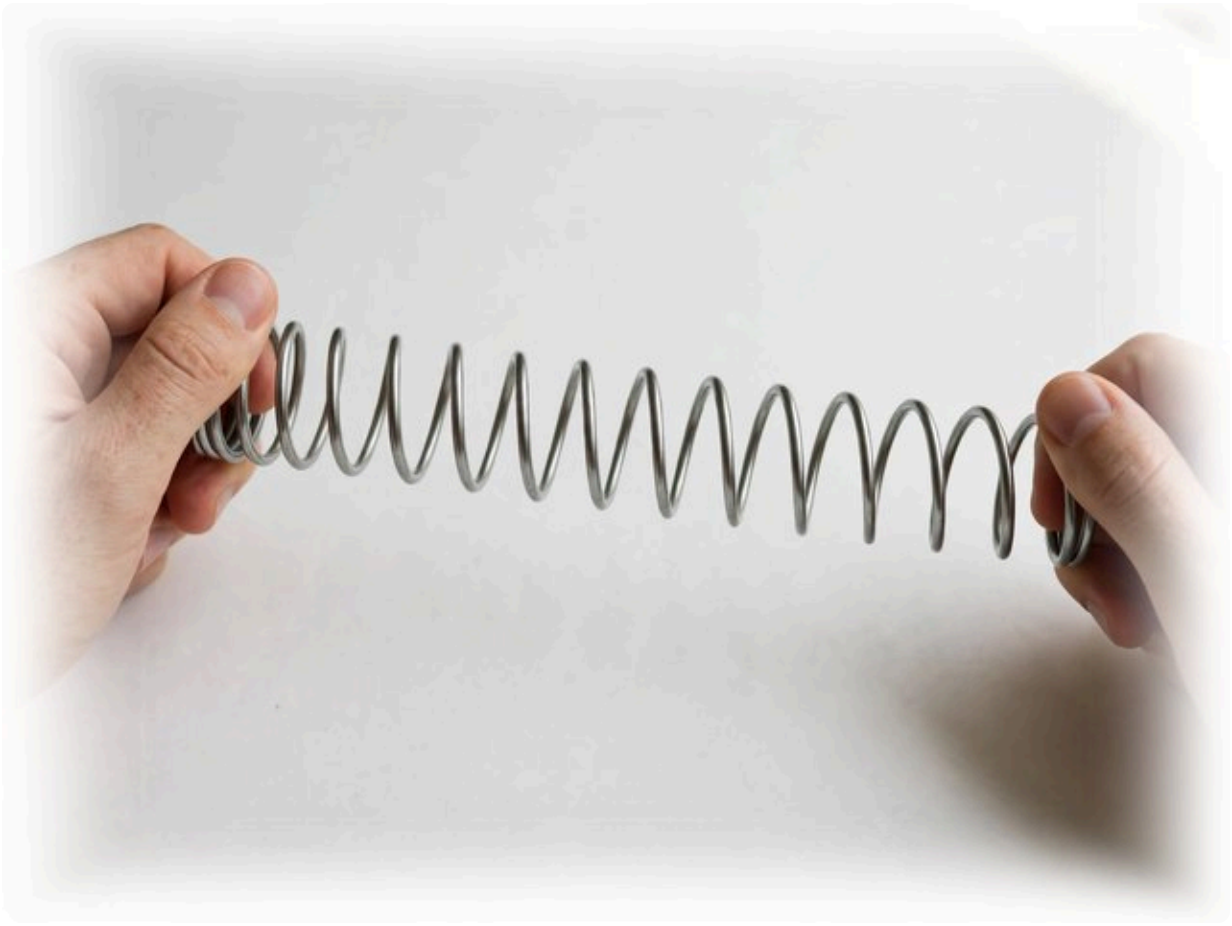
Understand It with Pulse | Flag a mistake

5 **An oscillator has angular frequency 10 times pi radians per second. Its period, in seconds, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A spring of constant 400 newtons per metre is stretched 0.1 metres. The elastic potential energy, in joules, is**



ANSWER

Understand It with Pulse | Flag a mistake

7 **A spring of constant 100 newtons per metre is stretched 0.4 metres. The elastic potential energy, in joules, is**



ANSWER

Understand It with Pulse | Flag a mistake

8 **The angular frequency of a simple pendulum depends on length and**

A gravity

B mass

C amplitude

D string colour

Understand It with Pulse | Flag a mistake

9 **Damping in an oscillator is caused by**

A gravity

B resistive forces

C spring force

D inertia

Understand It with Pulse | Flag a mistake

10 **In a displacement-time graph for simple harmonic motion the gradient gives**

A acceleration

B energy

C velocity

D force

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 4
2. 10
3. 8
4. 0.4
5. 0.2
6. 2
7. 8
8. A
9. B
10. C

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