Waves and SHM review

Watch: <https://www.flippingphysics.com/ap-physics-1-review.html>

SHM: <https://www.flippingphysics.com/ap1-shm-review.html>

Mechanical waves: <https://www.flippingphysics.com/ap1-waves-review.html>

Review questions

shm

1. An object is attached to a vertical spring and bobs up and down between points *A and B.* Where is the object located when its kinetic energy is a minimum?

A) midway between *A and B* B) one-fourth of the way between *A and B* C) at either *A or B* D) one-third of the way between

1. Two simple pendulums, A and B, are each 3.0 m long, and the period of pendulum A is T.

Pendulum A is twice as heavy as pendulum B. What is the period of pendulum B?

A) T/ 2 B) T 2 C) 2T D) T/2 E) T

1. In a wave, the distance traveled by a wave during one period is called:
2. Amplitude (B) Frequency (C) Wavelength (D) Displacement



1. A stretched wire resonates in one loop. The midpoint of the wire oscillates with amplitude of A. What is the traveled distance of the midpoint in one period?
2. A (B) 2A (C) 3A (D) 4A
3. A distance between two consecutive crests is called the wave’s:
4. Period (B) Frequency (C) Amplitude (D) Wavelength
5. The frequency of a wave is doubled when the speed stays the same. Which of the following is true about the wavelength?
6. Doubles (B) Quadruples (C) Halved (D) Decreased to one-forth