A spring stretches by 4 cm when a 10-g mass is hung from it.   If a total mass of 25 g attached to this spring oscillates in simple harmonic motion, calculate the period of the motion.

A.   0.635 sec
B.   0.401 sec
C.   0.854 sec
D.   1.000 sec
E.   0.250 sec


A small body is undergoing simple harmonic motion of amplitude A. While going to the right from the equilibrium position, it takes 1 second to move from x = + A/2 to x = + A. Find the period of motion.

A.   7.0 s
B.   8.0 s
C.   2.0 s
D.   4.0 s
E.   6.0 s


A body moves with simple harmonic motion. At t=0 it is released from rest at a displacement x=0.5 m.   If the frequency of the oscillations is 5 Hz, find the the displacement x at t=0.02 s.

A.   0.3 m
B.   0.5 m
C.   0.4 m
D.   0.1 m
E.   0.2 m