

Answer on Question #51965 – Physics - Other

The equation of a simple harmonic oscillator is given as

$$d^2x/dt^2 + \omega_0^2 x = ma$$

. The quantity

$$\omega_0$$

is can be used to determine

Solution:

ω_0^2 — angular frequency — is used to determine the frequency and period of the oscillations:

$$f = \frac{\omega}{2\pi}$$

$$T = \frac{2\pi}{\omega}$$

Answer: frequency and period