

### Answer on Question #51965 – Physics - Other

The equation of a simple harmonic oscillator is given as  $d^2x/dt^2 + \omega^2 x = ma$

. The quantity

$\omega^2$

is can be used to determine

#### Solution:

$\omega_0^2$  — 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

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