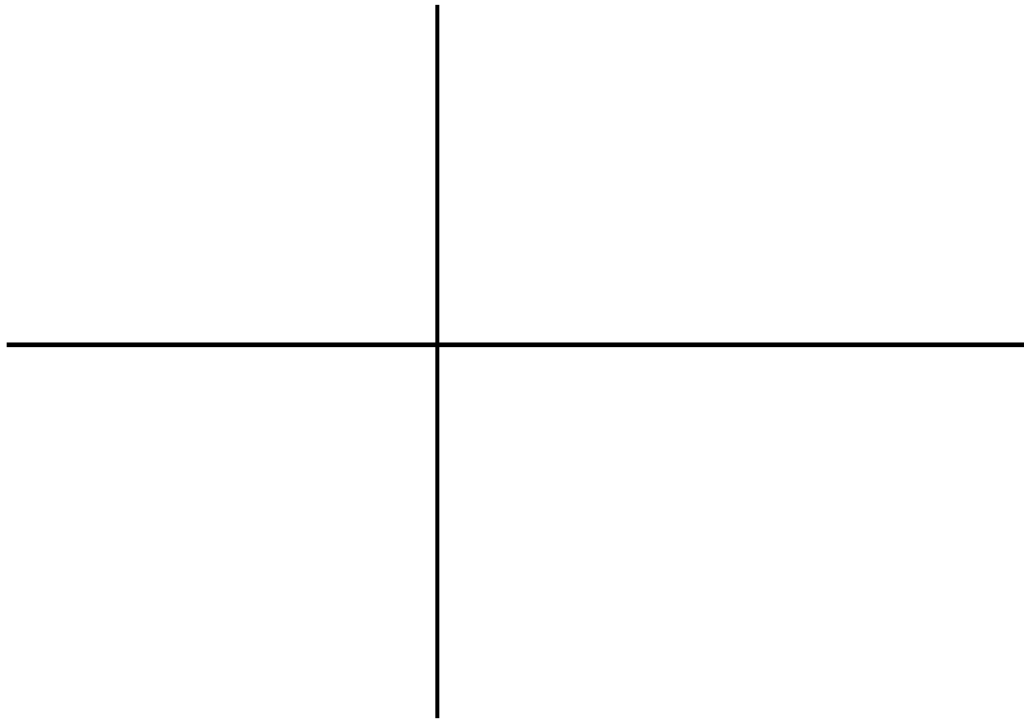


## Simple Harmonic Oscillator

A mechanical system whose acceleration is the negative of a constant times its position is called a simple harmonic oscillator. This can be mathematically written as:

where  $\omega$  is a positive constant called the angular frequency.

The solution of this equation can be written as either a cosine or sine function as



## Terminology

Equilibrium –

Displacement –

Amplitude –

Period –

Frequency

