

Answer on Question #72041-Physics-Mechanics-Relativity

If you want to send a gift to your friend on the other side of the earth digging a tunnel along diameter, then determine how distance varies with acceleration.

Solution

This is a well-known example of harmonic oscillations. So, the displacement will be proportional to the acceleration:

$$a = -\omega^2 x.$$

Where ω is angular velocity.

Answer provided by AssignmentExpert.com