

4 The time period T of a pendulum is given by

$$T = 2\pi \left(\frac{L}{g} \right)^n$$

where L is the length of the pendulum and g is the acceleration of free fall.

The equation is homogeneous.

What is the value of n ?

A -2

B $-\frac{1}{2}$

C $\frac{1}{2}$

D 2