

- 6** The time taken for an object to fall from rest through a certain distance on Mars is T_M . The time taken for the same object to fall from rest through the same distance on Earth is T_E . The acceleration of free fall on Mars is 3.71 m s^{-2} .

Assume that air resistance is negligible on both Earth and Mars.

What is the ratio $\frac{T_M}{T_E}$?

A 0.378

B 0.615

C 1.63

D 2.64