

16 A stone of mass m falls from rest at the top of a cliff of height h into the sea below. Just before hitting the sea the stone has speed v .

What is the average force of air resistance acting on the stone during its fall?

A mg

B $\frac{m(v^2 - 2gh)}{h}$

C $m\left(g - \frac{v^2}{2h}\right)$

D

$$m\left(gh - \frac{v^2}{2}\right)$$

17 A railway engine accelerates a train of total mass 1200 tonnes (1 tonne = 1000 kg) from rest to a