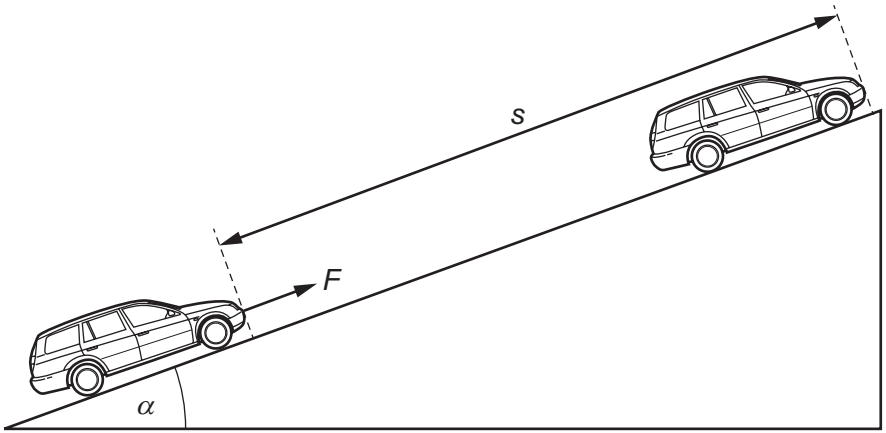
17 A constant force F, acting on a car of mass m, moves the car up a slope through a distance s at constant velocity v. The angle of the slope to the horizontal is α.



The acceleration of free fall is g.

What is the ratio $\dfrac{\text{gravitational potential energy gained by car}}{\text{work done by force } F}$?

A $\dfrac{mgs\sin\alpha}{Fv}$ **B** $\dfrac{mv}{Fs}$ **C** $\dfrac{mv^2}{2Fs}$ **D** $\dfrac{mg\sin\alpha}{F}$