5
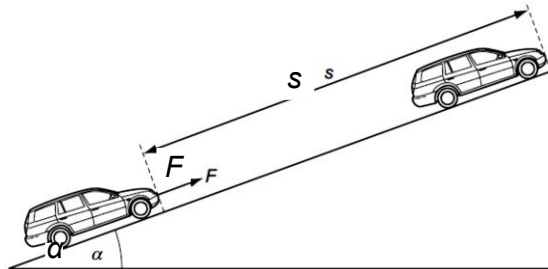
A constant force F, acting on a car of mass m, moves the car up the slope through a distance s at constant velocity v. The angle of the slope to the horizontal is α.

Which expression gives the efficiency of the process?

A

$$\frac{mgs\,\sin\alpha}{Fv}$$

B

$$\frac{mv}{Fs}$$

C

$$\frac{mv^2}{2Fs}$$

D

$$\frac{mg \sin\alpha}{F}$$