

## Assignment

A bus and a car moving with the same kinetic energy are brought to rest by applying an equal retardation force by the breaking system. Which one will come to rest at a shorter distance ?

Ans) Kinetic energy is the energy possessed by the body by virtue of its motion.

Retarding force is the force which opposes the motion of the vehicle.

Given that same kinetic energy and same retardation, force has been applied.

Work done by brakes = Force  $\times$  displacement

$$KE = \frac{1}{2}m(v)^2$$

Bus and car will come to rest at same time.