

A constant force  $F$  is applied to a stationary object of mass  $m$  on a frictionless surface. A constant acceleration increases the velocity of the object to some value  $v$  in a time  $t$ . It covers a distance  $s$  during this time.

Which value of kinetic energy is given to the object?

**A**  $Fst$

**B**  $Fv$

**C**  $Fs$

**D**  $\frac{ms}{2t}$