

18 The kinetic energy  $E_k$  of an object of mass  $m$  moving at speed  $v$  is given by the equation shown.

$$E_k = \frac{1}{2}mv^2$$

Which equation is **not** used in the derivation of this equation?

A  $F = ma$

B  $s = vt$

C  $v^2 = u^2 + 2as$

D  $W = Fs$