10 A supermarket trolley, total mass 30 kg, is moving at $3.0\,m\,s^{-1}$. A retarding force of 60 N is applied to the trolley for 0.50 s in the opposite direction to the trolley's initial velocity.

What is the trolley's new velocity after the application of the force?

A $1.0\,m\,s^{-1}$ **B** $1.5\,m\,s^{-1}$ **C** $2.0\,m\,s^{-1}$ **D** $2.8\,m\,s^{-1}$

Space for working