

for a body travelling with a uniform acceleration, its final velocity is $v = \sqrt{180 - 7x}$, where x is the distance travelled by the body then acceleration is

$$v = \sqrt{180 - 7x}$$

$$a = \frac{dv}{dt} = \frac{\frac{dv}{dx}}{\frac{dt}{dx}} = \frac{dx}{dt} \frac{dv}{dx} = v \frac{dv}{dx} = (\sqrt{180 - 7x}) * \left(-7 \frac{1}{2\sqrt{180 - 7x}} \right) = -3.5$$