

Example: Impulse and Cart.

A cart is traveling down a hall at a constant 2.0 m/s . What impulse is required to stop the cart if the mass is 95 kg ?

$$J = \Delta p = \overset{0}{p_{\text{final}}} - p_{\text{initial}}$$

$$J = -(95 \text{ kg})(2.0 \text{ m/s}) = \boxed{-190 \text{ N}\cdot\text{s}}$$