

Answer on Question #48881-Physics-Mechanics | Kinematics | Dynamics

A man of 2kg is thrown in the direction east with 2m/s velocity what is it's momentum?

Solution

The momentum is

$$\vec{p} = m\vec{v},$$

where m is the mass and \vec{v} is velocity.

So,

$$p = mv = 2\text{kg} \cdot 2\frac{\text{m}}{\text{s}} = 4\frac{\text{kgm}}{\text{s}}.$$

Answer: $4\frac{\text{kgm}}{\text{s}}$ in the direction east.