momentum

momentum means:

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

Impulse on the other hand is the change in momentum described by the equation:

$$Ft = \Delta mv$$

Conservation of momentum

Momentum is similar to energy in that the initial momentum is equal to the final momentum

$$\vec{p_i} = \vec{p_f}$$

for example what happens when one pool ball strikes another sqare on

$$\vec{p_i} = \vec{p_f}$$

$$\begin{split} m_1 \vec{v_1}_i + m_2 \vec{v_2}_i &= m_1 \vec{v_1}_f + m_2 \vec{v_2}_f \\ \not m_1 \vec{v_1}_i + 0 m/s &= 0 m/s + \not m_2 \vec{v_2}_f \\ \vec{v_1}_i &= \vec{v_2}_f \end{split}$$

momentum questions

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