



completely Inelastic Collision
the objects sticks together after collision

Inelastic Collision

Kinetic Energy is NOT conserved: $\sum K_i \neq \sum K_f$

Two-body 1-D (head-on) Elastic Collision:

$$v_{1f} = \frac{m_1 - m_2}{m_1 + m_2} v_{1i} + \frac{2m_2}{m_1 + m_2} v_{2i}$$

$$v_{2f} = \frac{2m_1}{m_1 + m_2} v_{1i} + \frac{m_2 - m_1}{m_1 + m_2} v_{2i}$$

Elastic Collision

Kinetic Energy is conserved: $\sum K_i = \sum K_f$

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