

Chapter 15B

Conservation of Momentum



Conservation of Momentum

- Initial momentum = Final momentum
- $(m_A v_A)_1 + (m_B v_B)_1 = (m_A v_A)_2 + (m_B v_B)_2$
- And $v = (v_A)_2 = (v_B)_2$
- $m_A v_A + m_B v_B = (m_{A+B})v$

Angular Momentum

- Similar to Linear
- $(I_A \omega_A) + (I_B \omega_B) = (I_A + I_B) \omega$

Example Problems

- Examples 15-6 through 15-9