Physics 1050     Laboratory #5 Momentum and Impulse

**Prelab Questions**

These questions need to be completed before entering the lab. Show all workings.

**Prelab 1**
In experiment 5, you will push one cart towards another stationary cart. They will collide, stick, and move together.

Prelab 1: Write the equation for the total momentum before the collision. Write the equation for the total momentum after the collision.

**Prelab 2**: If we have that \( m_1 = 0.500 \pm 0.005 \text{ kg} \), \( m_2 = 1.000 \pm 0.005 \text{ kg} \), \( v_1 = 0.25 \pm 0.01 \text{ m/s} \), and \( v_f = 0.07 \pm 0.01 \text{ m/s} \), calculate the initial and final momentum and the impulse. Include uncertainty with each calculation.