

**Prelab Questions**

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

Markers  
Initials

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.

**Prelab 3**

Write, in a sentence or two, the objective of this experiment.

Staple completed prelab to this page