

Prelab Questions

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

Marker's Initials

Prelab 1

If the mass of an object is 0.412 kg and its velocity is 0.436 m/s **right**, what is the momentum? Note: Consider the positive x axis to be to the right. Give your answer in unit vector notation.

Prelab 2

If the mass of an object is 0.412 kg and its velocity is 0.436 m/s **left**, what is the momentum? Give your answer in unit vector notation.

Prelab 3

The mass of an object is $(0.412 \pm 0.009) \text{ kg}$ and its velocity is $(0.436 \pm 0.008) \text{ m/s}$ **left**. What is the magnitude of the momentum and its uncertainty?

STAPLE YOUR PRE-LAB TO THIS PAGE

Laboratory Worksheet:**Name and Student Number:** _____**Partner's Name:** _____**Date:** _____

QUESTION 1:

Table 1: note: All masses can be found in the 2 attached files in the instructions.

	Mass	Uncertainty	Cart Label
Plastic Card			
Cart 1			
Total Mass for m_1			
Block			
Cart 2			
Total Mass for m_2			

QUESTION 2:

Table 2: note: Print a copy of *position vs time* graph with correct format.

	Value	Uncertainty
\vec{v}_{1i} [m/s]		
\vec{v}_{2i} [m/s]		
\vec{v}_{1f} [m/s]		
\vec{v}_{2f} [m/s]		

CHECKPOINT: Instructor Initial



Staple your graph to the opposite page

QUESTION 3:

$$\vec{p}_i =$$

QUESTION 4:

$$\vec{p}_i =$$

QUESTION 5:

$$\vec{p}_f =$$

QUESTION 6:

$$\vec{p}_f =$$

QUESTION 7:

QUESTION 8:

QUESTION 9:

QUESTION 10:

QUESTION 11:

QUESTION 12:

QUESTION 13:

QUESTION 14:

QUESTION 15:

QUESTION 16: