

## Prelab Questions

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

**Marker's  
Initials**

### Prelab 1

Using the coordinate system below, draw free body diagrams for mass A and mass B (Refer to Diagram 1).

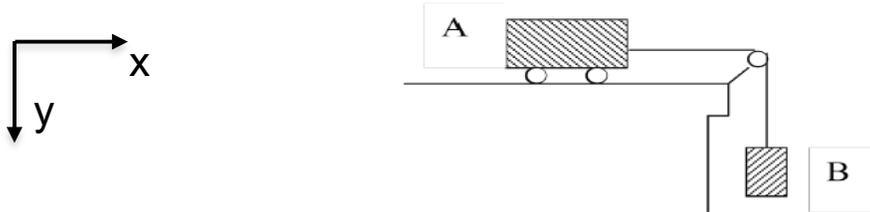


Diagram 1

### Prelab 2

Write  $\vec{F}_{net} = m\vec{a}$  for each of the two masses.

**STAPLE YOUR PRE-LAB TO THIS PAGE**

**Laboratory Worksheet**

Name and Student Number: \_\_\_\_\_

Partner's Name: \_\_\_\_\_

Date: \_\_\_\_\_

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**QUESTION 1:**

Table 1:

Run	$m_B$ (kg)	$W_B = m_B g$ (N)	$a$ ( $m/s^2$ )
1			

**CHECKPOINT:** Instructor Initial

2			
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**TABLE 2:** Note: Print a copy of the *weight vs acceleration* graph with correct format.

	<b>Value</b>	<b>Uncertainty</b>
<b>Slope</b> (enter unit)		
<b>y-intercept</b> (enter unit)		

**QUESTION 2:**

**TABLE 3:** Total mass measured by balance.

	<b>Value</b> (enter unit)	<b>Uncertainty</b> (enter unit)
<b>Total mass</b>		

**QUESTION 3:**

 Staple graph to the opposite page

**QUESTION 4:**

**QUESTION 5:**

**QUESTION 6:**

**QUESTION 7:**

**QUESTION 8:**

**QUESTION 9:**