

Prelab Questions

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

Marker's Initials

Prelab 1

For a falling ball, which bounces, draw the expected shape of the vertical position vs. time graph.

Prelab 2

From the position vs. time graph of an object moving with constant acceleration, how could you find the instantaneous velocity?

STAPLE YOUR PRE-LAB TO THIS PAGE

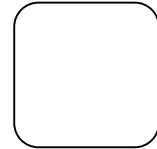
Name and Student Number: _____

Date: _____

Partner: _____

CHECKPOINT:

Have an instructor check your graphs and initial.



QUESTION 1:

QUESTION 2:

$$t_1 =$$

$$t_2 =$$

QUESTION 3:

$$x(t_1) =$$

$$v(t_1) =$$



Staple your graph to the opposite page

QUESTION 4: note: $t_1 \leq t \leq t_2$

$$v_{\max up} =$$

$$v_{\max down} =$$

QUESTION 5:

QUESTION 6:

TABLE 1: The fit results from *Position vs Time* graph

	value	uncertainty	units
Expected value of A (see instructions)		N/A	
Automatic Fit Parameter A			

QUESTION 7:**TABLE 2:** The fit results from *velocity vs time* graph

	Value	Uncertainty	Units
Slope			

QUESTION 8:

TABLE 3: The fit results from *acceleration vs time* graph

	Mean	Standard Deviation	Samples	Standard Error
Acceleration				

QUESTION 9:

$$g =$$

TABLE 4:

	<i>g</i> (m/s ²)	δg (m/s ²)	<i>Range</i> (m/s ²)	agreement
1	9.81	0.01		
2				
3				
4				

QUESTION 10:

Staple your graph to the opposite page