

P1310L, Newton's Laws –Part II

Lab 5, Raw Data Sheet

Submitted by: _____ Experiment's date: _____

Team members:

1.- _____ 2.- _____

3.- _____ 4.- _____

Instructor must initial: _____

Acceleration Through an Atwood Machine

Record the masses of each trial, and the slope of the velocity curve with appropriate SI units.

Table 1: Atwood Machine Data

Trial	m_1 (g)	m_2 (g)	Slope
1			
2			
3			

Capture a screen shoot of the velocity vs. time for one of the trials and include it in the next box. Plot(v vs. t) trial ____ Slope: _____



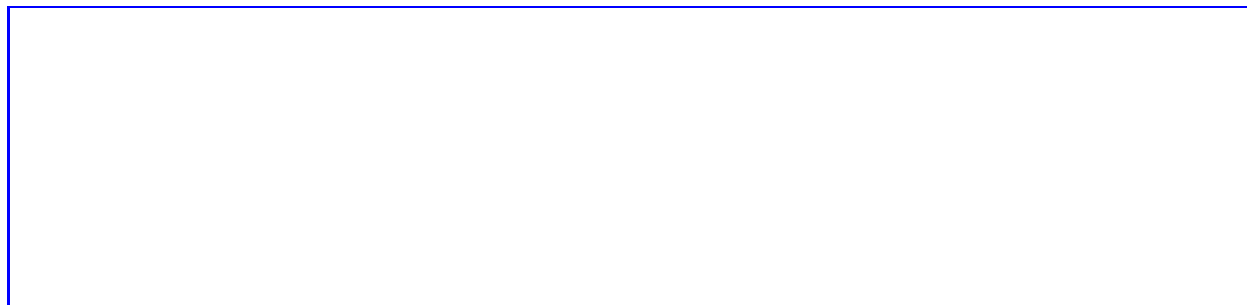
Static Friction on a Horizontal Surface

Do at least 3 trials per surface or as directed by your instructor. Record the type of surface and the maximum force applied, which occurs just before the 2 kg mass started to move.

Table 2: Static Friction Data

Trial	Surface Type	Maximum Force (g)
1		
2		
3		
4		
5		
6		

Capture a screen shoot of the Tension vs. time for one of the trial and include it in the next box. Plot(v vs. t) trial ____ Surface Type _____ Maximum Force: _____



Kinetic Friction on an Inclined Surface

Table 3: Kinetic Friction Setup

Mass (g)	Angle (degrees)

For each trial record the slope of the velocity curve and indicate the units in the header. Capture a screen shoot of the velocity vs. time for one of the trials and include it in the next box. Plot(v vs. t) trial ____ Slope: _____

Table 4: Kinetic Friction Data

Trial	slope ()
1	
2	
3	
4	