

P1310L, Collisions in 1 & 2 D

Lab 9, Raw Data Sheet

Submitted by: _____ Experiment's date: _____

Team members:

1.- _____ 2.- _____

3.- _____ 4.- _____

Instructor must initial: _____

One Dimensional Collisions

Length of the sail: _____ (cm)

Table 1: Columns left to right indicate collision type, car's mass and the time required to travel the length of the sail. The subindices 1 and 2 indicate car number, while i and f refer to the initial and final states. X stands for "not required".

Collision Type	m_1 (g)	m_2 (g)	t_{1i} (s)	t_{1f} (s)	t_{2f} (s)	$[t_{2f} + t_{1f}]$ (s)
Perfectly Elastic				X		X
Partially Elastic						
Totally Inelastic					X	X

Two Dimensional Elastic Collisions

Table 2: Spark Table Parameters.

Sparks frequency (Hz)	Puck's mass (g)

Table 3: Raw data: Δl_1 and Δl_2 are the distances between selected points along each track; θ_1 and θ_2 are the angles between the coordinate axes and the velocity vectors. **Note: time is the elapsed time between the selected points.**

State	$ \vec{\Delta}l_1 $ (cm)	θ_1 (degrees)	$ \vec{\Delta}l_2 $ (cm)	θ_2 (degrees)
Initial		zero		
Final				