## Data Table Newton's 2<sup>nd</sup> Law Experiment

This is a data table. It is not your results.

If you give this table as results you will be penalized 5 points.

This table is to be included in your lab data section.

Your results should have two parts:

Primary- A statement summarizing primary observations from plot of  $\Sigma Forces \ vs. \ acceleration$  (Use equation Eq. 3 for plot)

Secondary- Compare mass of cart determined using triple beam balance & using slope from plot

Hanging Mass (g)	Cart, mass (g)	Calculated Tension (N)	Measured Tension (N)	% differ [column 3 & 4]	calculated Acceleration (m/s²)	measured Acceleration (m/s²)	% differ [column 6 & 7]	Friction Weight (m <sub>frict</sub> g) (N)
50 (1 <sup>st</sup> run)	1x mass cart		-					
100 (2 <sup>nd</sup> Run)	1x mass							
50 (3 <sup>rd</sup> run)	2 x mass					***************************************		
100 (4 <sup>th</sup> run)	2x mass							*