

# Number 1 Super Lab report!

## *Playing with LaTeX*

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## Supervision

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## Context

This is a real quick experiment using some equations from LaTeX.

Using a quick example from last week's lab, I'm going to list a few of the values and formulas. The first step in method I was to find the errors that did not require calculations, (i.e.) the ones which are dependant on the measurement tools themselves. Taking half of the smallest increment in our ruler, masses and the angle scale of the ballistic pendulum.

1.  $\delta\theta = 0.05^\circ$
2.  $\delta m = 0.1g$
3.  $\delta(M + m) = 0.1g$
4.  $\delta R = 0.0005m$
5.  $\delta(1 - \cos\theta) = 0.00866$

## Equations

Rule 4:  $\frac{\delta Q}{Q} = \sqrt{\left(\frac{m\delta A}{A}\right)^2 + \left(\frac{n\delta B}{B}\right)^2}$

$$V_i = \left(\frac{M+m}{M}\right)\sqrt{2gR(1 - \cos\theta)}$$

Hopefully this was the start of something beautiful in my future lab reports!