

Atwoods Machine Lab

- Preliminary Questions
- Data/Observations
 - sample graph (v-t graph with slope) + ID
 - data tables.
- Analysis
 1. } show sample calc.
 2. }
 3. Graph a vs Δm ; state proportionality
 4. Graph a vs m_T ; state proportionality.
 5. Combine proportionalities

* Specific Equation.
Use excel to find a mean k .

Δm	m_T	a	k

← insert excel

Sample calculation for k .

- Extensions
 1. Derive an expression for acceleration of an atwood's machine.
Compare equation to equation from #5.
(theoretical) (experimental)
 2. Use excel to calculate the theoretical acceleration and % error. Show sample calc.

Excel from #5	theoretical acc	% error
		$\left(\frac{\text{exp} - \text{theor}}{\text{theor}}\right) \times 100\%$

3. find unknown mass. Insert LP graph with slope