The Rolling Can

Remember to complete all calculations in kg, m, s, N and J!

Also include <u>complete</u> calculations: equation, numbers in equation, answer with a unit.

<u>Data:</u>				
Can mass:				
Can diameter:				
Can radius:				
Ramp length:				
Ramp height:				
Level surface distance:				
	Trial 1	Trial 2	Trial 3	Average
Time on the ramp:				
Time on level surface:				
Dynamics Analysis				
Torque:				
Moment of inertia	a :			
Angular accelerat	tion			
Translational acc	eleration			

Energy Analysis
Master equation:
Equation for this situation:

Angular Momentum Analysis

Master equation:

Equation for this situation:

Questions

- 1. Percent error acceleration
- 2. Percent error velocity
- 3. Percent error velocity
- 4. Error comparison