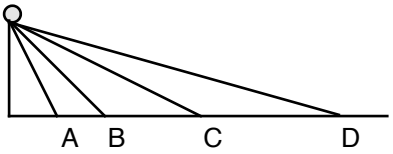
ABRHS PHYSICS (CP) NAME: _____

Lab 8-1: Rolling Down a Ramp

Purpose: Imagine there is a ball at the top of a hill and there are several ramps getting to the bottom, each with a different steepness. There are two questions you need to experimentally determine:



1. Does the steepness of the ramp affect the time it takes the ball to roll to the bottom, and if so, how?

2. Does the steepness of the ramp affect the final speed of the ball at the bottom of the ramp, and if so, how?

Procedure:
Describe your setup, what you measured and how you measured it.

Data: Height for all trials: _____

Trial	*Distance (m)*	*Time (s)*	*Time (s)*	*Time (s)*
1				
2				
3				
4				

Calculations:
1. For each trial, calculate the average time and record it below. In addition, copy the distances down again.

2. For each trial, calculate the final speed of the ball at the bottom of the ramp. Show your calculations (including equations) for the first trial here, but record all your results in the table below.

Trial	*Distance (m)*	*Average Time (s)*	*Final Speed (m/s)*
1			
2			
3			
4			

Conclusion:
So what did you find? Remember that there are two things you were asked to determine.