

Now use the information you have gathered to figure out the following quantities. **Please write in the correct units for each.**

The velocity of the marble at A:

$$v_A = d_A / \Delta t_A :$$

The velocity of the marble at B:

$$v_B = d_B / \Delta t_B :$$

The change in velocity between A and B:

$$\Delta v_{AB} = v_B - v_A :$$

The acceleration of the marble between positions A and B:

$$a = \Delta v_{AB} / \Delta t_{AB} :$$

Figure out (using geometry: SOH CAH TOA and a yardstick, don't worry about using a protractor) the angle of your ramp. Write your answer for angle and acceleration in the table below. Then, repeat these steps using a *different* angle. (You can do the work for your second angle on a piece of scratch paper: I don't need to see it here.)

<i>Angle</i>	<i>Acceleration</i>

Answer in complete sentences.

1. What was the point of this exercise?
2. What were the greatest sources of experimental error in this experiment? (Note: if you wish to include 'human error,' please include the specific type of error the human made, and why the human involved didn't simply correct the error he or she made.)
3. What part of this exercise did you find the most difficult? What specific steps can you take to make sure that you understand these difficulties by the time of the next exam?