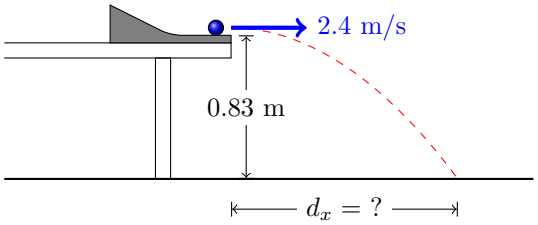
Name: Date: Period:

Marble Lab - MAKEUP IF ABSENT

1. In the lab, we rolled a marble down a ramp and let it hit the floor. Assume that the initial velocity of the marble as it left the table was 2.4 m/s and that the table is 0.83 m tall. Indicate your positive x- and y- direction on the diagram and use it to calculate where the marble should land.



2. Which direction is the marble travelling right when it leaves the table? Would you call this the x-direction or the y-direction?

3. What are our knowns (what do we already know, or can easily measure)?

x-direction	y-direction

4. For what values do we need to solve?

5. How can we solve for the x-displacement of the marble? Try it:

Conclusion

6. What is the only variable that is the same in both the x- and the y- directions? Why does it make sense that this variable is the same?

7. To find how far a projectile goes, you will usually solve this in two steps. What are the two steps?