

# Chapter Assignment Five

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## *Ballad of Fallen Angels*

The online assignments are great for learning/testing small parts of the course. To encourage a greater cohesion among the many topics we will cover, I include these chapter assignments.

These are 20 points each.

### **This Chapter Assignment**

For this Chapter Assignment, you will need to use functions to calculate certain aspects of a projectile flight off a cliff. The specifics are provided online and based on your student ID number. To get those specifics, go to

<https://courses.kvasaheim.com/math121/projectile/>

As with the second Chapter Assignment, you are given the option to practice or do the assignment. You are given the initial height of the projectile and the initial velocities. Your job is to calculate three things: the time the projectile spends in the air, the horizontal distance it travels, and its maximum height.

Remember that we are assuming that there is no air resistance. That means the horizontal velocity does not change and that the vertical velocity is only affected by the acceleration due to gravity ( $32 \text{ ft/s}^2$ ).

Getting the answers correct results in a grade of 100%. If any answers are wrong, it will receive a grade of 0.

Remember to use step 4 of Pölya's problem solving technique.