

Project 6 - Initial Value Problems - Part D

Due Friday 3-8

This assignment will blends an initial value problem with vectors.

1. A baseball player hits a 0.15 kg baseball at a 30 degree angle. She hits the ball at 80 m/s.
 - (a) How far does the ball go? No air drag
 - (b) How far does the ball go? Assume air drag model $F_D = 0.005 * v^2$ in a direction opposite the velocity.
 - (c) Graph $y(x)$ in Excel.
 - (d) At what speed must the player hit the ball in New York to get a home run (distance=100m). How about Denver where the air drag coefficient is about 20 % less due to thinner air.

Submit your cpp file to the P6 dropbox. Please label your cpp file Name6D.cpp.