PHYS 1110 Group Work Sheet 6
Projectile motion

The distance-distance grid below shows two vectors: $\vec{A}$, the change in position of a ball after 1 s in flight, and $\vec{B}$, the vector that is added to the change every second by the acceleration due to gravity. Determine the subsequent positions of the ball at 1-s intervals using the following procedure:

a. Starting at the ball's current position, copy the displacement vector from the previous second.
b. Add the change vector $\vec{B}$ to it..
c. Repeat steps a–b until the ball hits the ground.