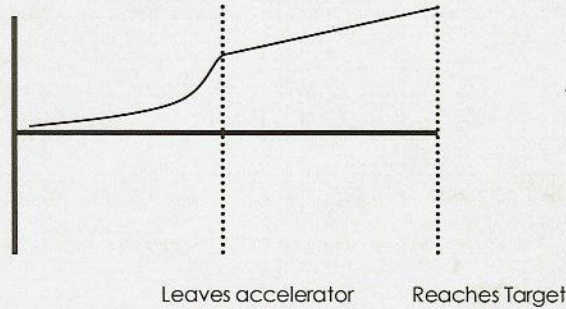


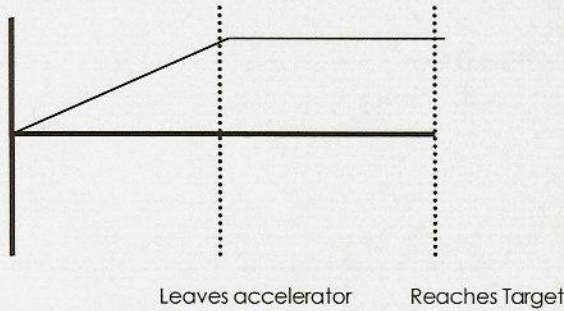
After the initial conditioning of the particles they are directed to the sample in which is to be analyzed. Between the accelerator and the target the particles are focused into a beam through the use of magnetic fields. Draw the displacement, velocity and acceleration versus time graphs for the particles from the time they start in the accelerator to the time they hit the sample. Consider there to be no acceleration after the particles have left the accelerator.

Titles?

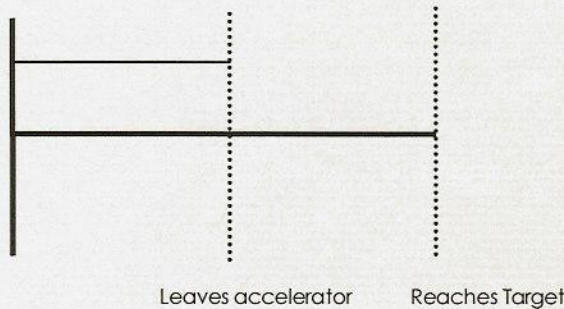
Displacement



Velocity



Acceleration



Units?
 I could not have produced these from your instructions. You need to provide much more guidance, and maybe even the 1st graph.
 Can this be extracted from these graphs?

Now we will analyze the collision of these particles with the surface of the target. The collision is considered to be perfectly elastic, which means that both momentum and energy are conserved during the collision. With the concepts of conservation of energy and momentum, the change in energy for the alpha particle can be related to the mass of the particle it collided with.