

A skilled shooter tries to hit an apple with the Tomahawk arrow. At the same time, as he fires, the apple falls freely.

If the velocity of the arrow is  $\langle 97, 0, 0 \rangle$  m/s, heights for both (apple and tomahawk) are  $\langle 0, 100, 0 \rangle$  m and horizontal distance between them is 400m, calculate the time when the arrow will hit the apple and visualize it as a simulation.

Create an arrow and apple as defined.

Define a loop to update the speeds and positions of both (for both apple and arrow) including the effect of gravity.

Plot the graph (Position Vs Time)

