**Pumpkin Drop!**



1. Analyze the video by marking the pumpkin as it falls.
   1. Sketch a graph of x vs t and v vs. t from logger pro.



* 1. Inspect the velocity vs time graph.
     1. What is the acceleration of the pumpkin?
     2. Compare the value to g (-9.8 m/s2) by finding the % difference.

Percent difference = |First Value − Second Value|

**(First Value + Second Value)/2**| × 100%

* 1. Calculate the velocity at impact (or the frame just before) using either the **height** or **time** logger prodata with -9.8 m/s2as your expected acceleration.
     1. What is the calculated velocity?
     2. What is the velocity according to the data?
     3. What is the % difference between the two values?