Math 30-2 Drop Lab- Teacher Notes

This lab helps students understand polynomials better by getting them to recognize what each part of the polynomial means in a real life example. (1 class)

* Present the lab
  + Don’t give away how the experiment will be run, nor what or how they will be calculating. Just give them the equation and recommend they drop erasers or other “safe” items that will not have much air resistance. The idea is that they figure out what the equation is calculating and how they can use it to find the overall height.
* Collect the data
  + I could have brought bouncing balls for them to drop, but everyone found something appropriate by themselves.
  + Y**ou can use any location to drop at, but the bigger the better.** If the distance is too short it would be hard to time its fall. We used the handrail to the lower floor outside Math Central (5.1m) and for a different class, the drop from the handrail down to the lower area by the library (6.1m).
* Analyze the data
  + The students now need to realize, if they haven’t already, that h0 is what they are looking for the original height or the height of the railing.