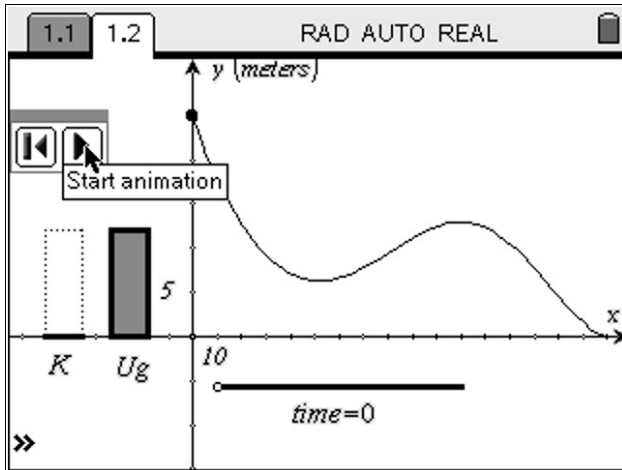
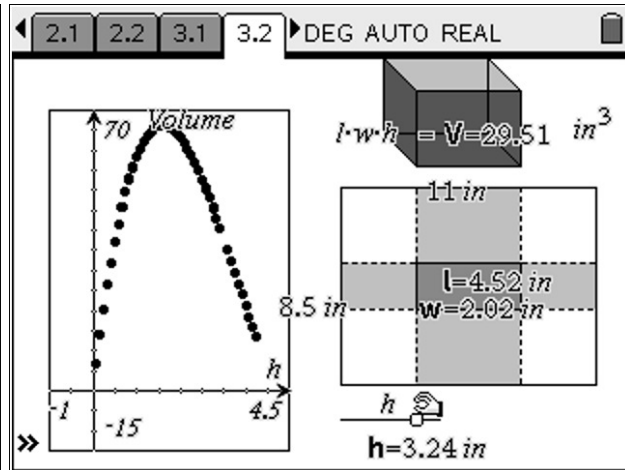


# Formative Assessment and Data Collection with TI-Nspire™ Navigator

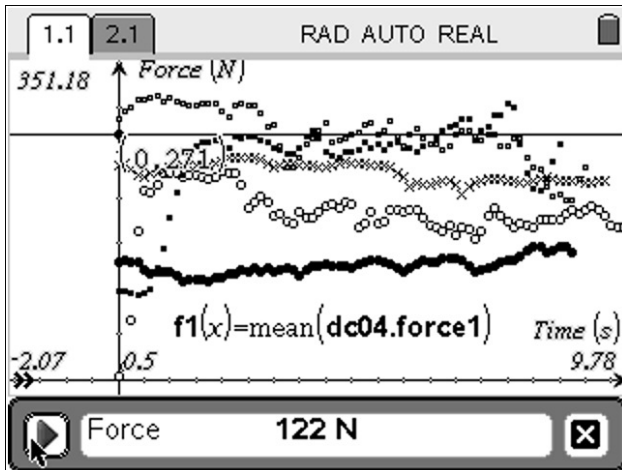
*Why I use TI-Nspire CAS and the benefits of TI-Nspire Navigator.*



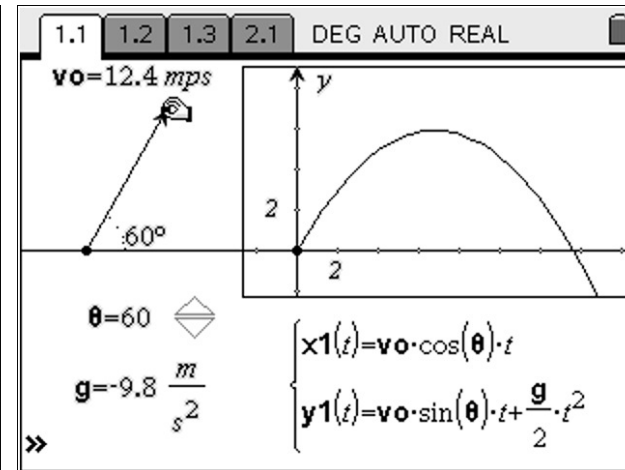
Frictionless Roller Coaster



Box Problem related to aluminum boat lab – max volume.



Hand Dynamometer data collection of 5 squeezes



Projectile Motion Simulation

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More robust than any clicker system, the TI-Nspire Navigator & TI-Nspire handheld are versatile in improving documented formative assessment, data collection and student engagement. It has enabled me to get feedback from a quite class and get 100% involvement in the class were one student says the correct answer right away.

### TI-Nspire Navigator

1. Easily prepare questions in advance and send the file. Students can work at their own pace. (Send many file *fast*.)
2. Class Analysis & Slide Show – this can automatically or manually be graded
3. Transfer Tool can be used to send & delete many file without students even being logged in.
4. Screen capture. See what is on their screen. This is useful for accountability, providing assistance, and for formative assessment - for example Swingometer.tns

Want to discuss what is on a screen? Drag & drop into your notes or into a Word doc.

5. Quick Poll - great for open response questions, discussion starters and review for the quizzes and test.
6. Live Presenter
7. Quickly upgrade OS (operating system)

### What's so great about the TI-Nspire?

1. Pretty Print – looks like what is on students' paper or textbook – they make few mistakes
2. Incredibly easy to use data collection. There are so many Vernier probes that automatically work.  
<http://www.ti-nspire.com/tools/nspire/resources/sensors.html>
3. TI-Nspire CAS – the CAS stands for Computer Algebra System. When the focus is the science, we don't need students to be held back because of the algebra.
4. Resolution – it has more pixels than any other TI graphing calculator. (What if it is too small for your eyes?)
5. It even has grayscale (color on the software)
6. Geometry is integrated. Dynamic geometry in the hands of students! This means lots of great simulations can be and have been made.
7. Animation
8. CAS has units and built in constants. For example  $_g$ ,  $_Gc$ ,  $_c$ , ...
9. Notes - makes it so much more of a teaching and learning tool.
10. History preserved. Where did a student go wrong? Copy the history. Computer short cuts also work like CTRL C, V, X, S, Z
11. **sliders**
12. The many inquiry activities that have been written.

### Links

<http://covenantchristian.org/bird/TTT.htm>

[http://education.ti.com/educationportal/sites/US/nonProductSingle/global\\_forms\\_nspire\\_trial\\_CD.html](http://education.ti.com/educationportal/sites/US/nonProductSingle/global_forms_nspire_trial_CD.html)

- free Learn & Earn program

<http://www.tiphysics.com/> - great ready-to-use activities