

Why switch from TI-89™/Voyage 200™ to TI-Nspire™ CX CAS?

Some of the features that may lead you to decide to use the TI-Nspire CAS handheld and software in your classroom are:

1. 100% compatible handheld and computer software (PC and Mac) with universal files and *fast* file transfers. **TI-Nspire Student Edition** software is *included* in the single-user retail version of the handheld.

2. Faster, large **color** screen (CX model) with a great backlit hi-res display, tons of memory, TouchPad mouse control (like a laptop), and easy-to-use numbered TI-84-style menus. If one understands the similarities of the TI-Nspire to a computer and uses MENU and CTRL+MENU (right-click), then TI-Nspire is *more intuitive* than the TI-89, especially for students who are new to handheld graphing technology.

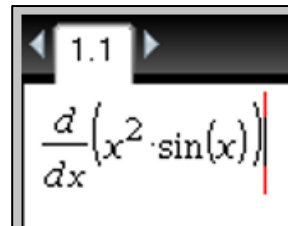
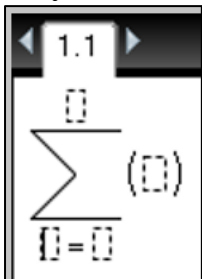
3. **Documents** (files): Students create and save *all* of their work as documents with Notes, thus enabling teachers to see problem-solving techniques and quickly assess individual student understanding. *This document-based system is the most significant improvement over the TI-89/Voyage 200.*



3. **Symbolic mathematics templates** on the input as well as the output. These templates can be used in any of the applications: Calculator, Graphs, etc.

Students make **FEWER** mistakes. Instead of *nderiv(...)*, students can use correct derivative notation.

TI-Nspire CX CAS helps students explore, check their work, and do more mathematics the way that it appears in the textbook.



π. The dynamic relationships among environments (apps) is great for examining problems graphically, algebraically, numerically and verbally. **Multiple Representations** in a dynamic, interrelated, interactive environment:

- **Calculator** – a TI-89-style Calculator with full CAS functionality that extends the TI-89 set.
- **List & Spreadsheet**- a real spreadsheet that doubles as a list editor. Perform data analysis (regressions) right in the spreadsheet!
- **Graphs & Geometry** - *integrated* graphing and interactive, dynamic geometry all in one application
 - Graphing capabilities: Function, Parametric, Polar, Sequence, Scatter Plot, Inequalities, **3D** and **Differential Equation** (slope fields). Interactive transformation graphing by grabbing or using sliders and data capture. Easily “grab-and-move” graphs, constructions and axes to observe relationships.
 - Unlike Cabri™ and Sketchpad™ on the TI-89, this Cabri-based Geometry is integrated right into the graphing application. Having a handheld device that can be beneficial in Geometry and having Geometry available right in the Graphing application makes the TI-Nspire CX CAS the best tool for all of school mathematics.

- **Data & Statistics** - 'Fathom™-style' statistical graphing and analysis, showing Least Squares, residuals, and much more. Explore statistical data using different graphical methods (see 'add moveable line').
- **Dynamic Math Boxes in Notes:** Changes are reflected in the output of the math box. Unlike the Calculator where results are static, the Math Box result (output) changes based on actions taken elsewhere in the document.
- *new* **Vernier DataQuest** – for easy, integrated data collection and analysis using science sensors/probes. Also, a new **Lab Cradle** for attaching sensors.
- **Programming** – the programming environment is good, but not great. Here the TI-89 beats the TI-Nspire a bit, but there are other slick ways of accomplishing cool stuff with the integrated Geometry and Spreadsheet programming in the TI-Nspire.
- All APPS **communicate** with each other. Split screen layouts are available to see and manipulate multiple representations of a concept or figure on a single screen. This improves depth of understanding and encourages discovery and exploration.

5. **Resources:** There are some awesome activities (TI-Nspire files with documentation) that are already written. Besides what can be found on TI's Activities Exchange at <http://education.ti.com>, there are also many ready-for-the-classroom activities at <http://timath.com/> and www.ti-mathspired.com. Other resources are available far and wide.

6. **Updates and supporting software:** TI-Nspire is updated regularly with new a Operating System (OS) that includes new features based on educator feedback.

- All TI-Nspire handhelds are **TI-Nspire Navigator™** compatible
- **Connect To Class™** – similar to Navigator to copy files and install an OS between computer and class handhelds via connecting cables
- **TI-Nspire Teacher Software** with handheld emulator and the ability to edit Questions, take screen captures, 'send to handhelds' using Transfer Tool, and a *Content Explorer* workspace that links directly to the web or to a school's internal activity repository for finding and previewing relevant activities.
- Free **TI-Nspire Computer Link** software to copy files and install an OS between computer and a handheld and collect device screen captures (if you don't have the computer software)

So, what can the TI-89 do that the TI-Nspire 3.0 can't? Not much...

- Better programming features (so far)
 - TI-Nspire programming capabilities are not as robust as the TI-89 but there are other ways of accomplishing interactive graphical effects on TI-Nspire that are similar to 'programming' effects.
- Apps (like ME*Pro) and the Symbolic Math Guide (SMG) are not available on TI-Nspire
- Games