# Using the TI-Nspire

A session for getting started…

Turning it on

- Unlike other graphing calculators, the TI-Nspire is set up to work like Microsoft Office on a computer. There are 5 basic applications that can be run by opening multiple pages.

- Each time you work on the calculator, you will want to either open an existing file or begin a new one. Today, we will do both. Click on the right arrow below begin.

Using the "home" menu

- The "home" menu is accessed by pressing the top right 🏠 key. This is where you will go to begin your work.

- Press "home" and choose "6: New Document" by either pressing the "6" key or by using the wheel of arrows to highlight that choice and the white circle to select that choice.
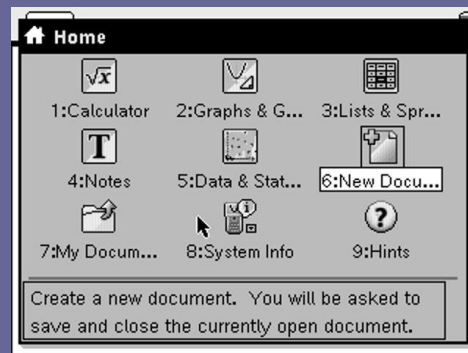
The basic commands

- If there was a document already open and in progress, you will be prompted about saving the document. Unless it is your work, choose "No."

- You will then be given a list of the 5 applications available to work in. Choose the first choice for "Add Calculator."
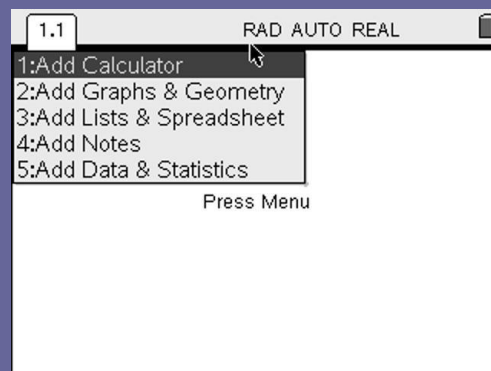
The Calculator

- The calculator is where you will perform all basic computations.

- Press ![ctrl] ![×] to bring up a template for various symbols that you can use.

- Use the symbol that looks like a fraction to type in $\frac{3}{5} + \frac{8}{7}$. Press ![enter] .

- The calculator is set to default to a fraction answer. To get a decimal approximation of the answer, press ![ctrl] ![enter] .

Opening a new page

- When you are ready to open a new application, you can insert a new page by clicking . You will again see a list of the available applications.

- This time, choose "2: Add Graphs & Geometry.

- Notice that the top of the screen just added "1.2" as the selected tab. This means you are on Problem 1, Page 2.

Using the graphing menu

- At the bottom of the screen, you should see *f1(x)=*. This is the same as the *Y=* key on other graphing calculators.

- Type in *3x-2* and press ⬡enter . The line of this graph will appear and your *f1(x)=* menu will minimize. To get this to reappear, press 🔘tab .

- You can type in another equation or arrow up to edit previously graphed equations.

- Use the [ctrl] [I] command to insert another new page. Choose to insert another graph page. On this page, we are going to hide the axes, which will allow us to sketch using Geometry tools.

- Press [menu] to access the "View" options and find, "Hide axes."

- The menu is also where you will find all of the drawing tools for creating points, lines, shapes, and performing constructions and transformations.

- Under **menu**, choose "Shapes," and "Triangle."
- To create your first vertex for the triangle, click anywhere on the screen. Then, move your cursor and click again to create the second and third vertices.
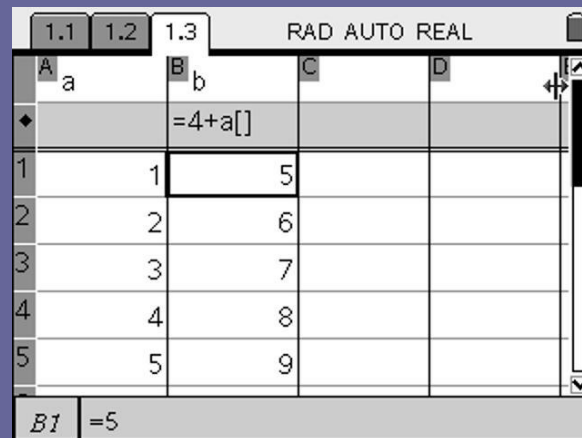
Using Lists & Spreadsheets

- Insert a new page and choose "Lists & Spreadsheets." It should look a lot like Microsoft Excel!

- To start with, we need to define our variables, which will be named in the first box at the top of the columns. For now, call column A, "a" and column B, "b".

- Fill in column A with the numbers 1 thru 5. Under column B, in the grayish box, type the expression *4+A* and press ⊘ .

- You may be asked about a column reference. Click "ok."

- You will notice the column B will fill in with all the values corresponding to the values in A, adding 4 to each of them.

Using Data & Statistics

- Insert a new page and choose "Data & Statistics." This is the only application on the *Nspire* that is dependent on data from another page.

- You will see data points randomly arrayed on the screen. The calculator is pulling the data from the spreadsheet you created earlier.

- Use the wheel to scroll down to the x-axis and click where indicated to add the variable "a" to that axis. The calculator will label the axis for you and automatically choose a scale to count the axis by.

- Repeat these steps to label the y-axis with the variable "b".

- Click [menu] and notice how the options have changed for this application. Choose "Window" and "Settings". Here, you can set the window using the [tab] key to navigate through the choices. Press "ok."

Using the Notes page

- Insert a new page and choose "Notes."

- This application is only for typing. You can use the green alphabet keys as well as all the other keys and templates for special characters.

- To use a capital letter, press [CAPS] and then that letter. For caps lock, press [ctrl] [CAPS] .

Access many other characters by pressing [ctrl] [∞β°]

| 1.3 | 1.4 | 1.5 | 1.6 | RAD AUTO REAL |

This is SOOOO cool!!
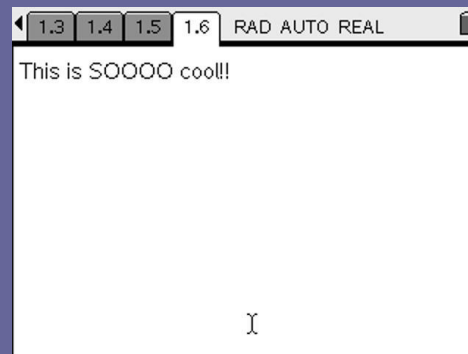
Moving between pages

- Now, move back to the first page you created, the calculator. To do this, ⬚ctrl⬚ ⬚◀⬚ repeatedly to move backwards in your pages.

- Or, press ⬚ctrl⬚ ⬚⬆⬚ to view all the pages as thumbnails and choose the one you want to view.
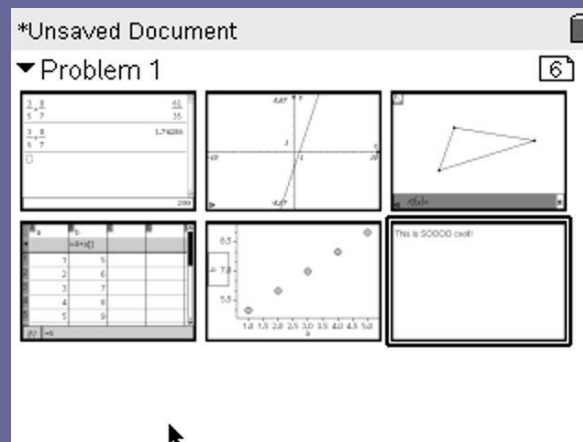
The "tool" menu

- By pressing ctrl 🏠 you can access the tool menu, much like the menu along the top of any computer application.

- Under "File," you'll find an option for "Save As." Go here and save your work, naming the file with your "last name, first name."

Skills Check-up

- Now we are going to test your skills and understanding of the basic functions of the TI-Nspire.

- Use your calculator to help you answer the following questions.

- When you are finished with the quiz, follow the directions on the last slide to send me your work as you may turn in an assignment completed on the calculator in the future.

#1. What button would I need to press first to access the "tool" menu and save a document?

You're right!!

Click below to continue to the next question!!

Incorrect!

Click on the "?" key below to review the slide on that topic. Then, you will be able to re-answer the question and continue.

Accessing the tool menu

- By pressing ⌨ctrl 🏠, you can access the tool menu, much like the menu along the top of any computer application.

#2. I just created a spreadsheet using data and want to view my data as a graph. Which application do I need to insert to do this?

Graphs & Geometry

Data & Statistics

Calculator

You're right!!

Click below to continue to the next question!!

Incorrect!

Click on the "?" key below to review the slide on that topic. Then, you will be able to re-answer the question and continue.

Viewing data as a graph

- Insert a new page and choose "Data & Statistics." This is the only application on the *Nspire* that is dependent on data from another page.

- You will see data points randomly arrayed on the screen. The calculator is pulling the data from the spreadsheet you created earlier.

#3. I am trying to find the absolute value of 16-32. How do I type this problem in on a calculator page?

Press [ctrl] [template] for the template

Press [template] [ctrl] for the template

Type in: *absolutevalue(16-32)*

You're right!!

Click below to continue to the next question!!

Incorrect!

Click on the "?" key below to review the slide on that topic. Then, you will be able to re-answer the question and continue.

Calculator Commands

- The calculator is where you will perform all basic computations.

- Press   to bring up a template for various symbols that you can use.

#4. I just graphed some data in my "Data & Statistics" page. How do I edit my window settings?

Go to the menu and choose window. Use ctrl to change each setting.

Go to the menu and choose window. Use tab to change each setting.

Press the window button and change each setting.

You're right!!

Click below to continue to the next question!!

Incorrect!

Click on the "?" key below to review the slide on that topic. Then, you will be able to re-answer the question and continue.

Changing the window

- Click 【menu】 and notice how the options have changed for this application. Choose "Window" and "Settings". Here, you can set the window using the 【tab】 key to navigate through the choices. Press "ok."

#5. I want to draw a triangle and transform it on my calculator. Which application should I be using?

Notes

Geometry Sketchpad

Graphs & Geometry

You're right!!

Click below to continue to finish today's exploration and to turn in your work.

Incorrect!

Click on the "?" key below to review the slide on that topic. Then, you will be able to continue to the finish of the exploration and turn in your work.

Sketching for Geometry

- On a Graphs & Geometry page, you can choose to hide the axes, which will allow us to sketch using Geometry tools.

- Press `menu` to access the "View" options and find, "Hide axes."

- The menu is also where you will find all of the drawing tools for creating points, lines, shapes, and performing constructions and transformations.

Congratulations!!

- To turn in your work for today, you'll want to send the file you created and saved to my computer.

- To do this, you will want to click in to one of the ports and go to [ctrl] [⌂] , choose "File" and "Send."

- Select the file you saved with your name and watch my computer screen for verification that the file was sent. Then, unplug from the port and turn off your calculator by pressing [ctrl] [off on] .