Welcome to TI Nspire

Basic Key Strokes Reference

Created by Anthony Thomas
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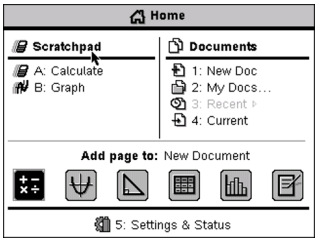
Home Screen

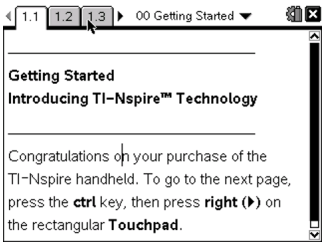
- To get to the ***HOME SCREEN***, simply click the (on) button.
- To quickly access the calculator simply press the letter A on the key pad
- To quickly access graphing, simply press the letter B on the keypad.
- To create a new page, press the number 1 or you can also use the touchpad to move the arrow over "NEW DOCUMENT" and then click by pressing the center of the touchpad.
- Open a document by going to "MY DOCUMENTS" by pressing the number 2 or by moving arrow and click on it.
- Follow the instructions in the next column for more instructions on keystrokes within a document..

Document Screen

- Move to the next page by clicking on (ctrl) and then the right or left arrow.
- There are several different types of pages that can be created.
  - -Calculator
  - -Graph
  - -Geometry
  - -Lists & Spreadsheets
  - -Data & Statistics
  - -Notes
- You can type on Notes pages using the letters at the bottom of the keypad. You will often respond to questions on NOTE pages.
- To see the entire document, click (ctrl) and then the UP arrow.



Home Screen



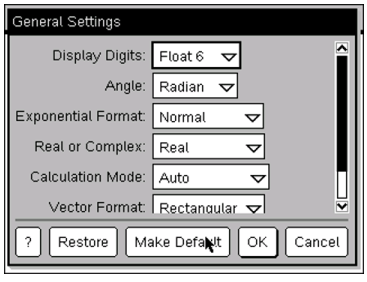
Sample Document Screen

Other Important Keystrokes

The TI Nspire is more like a handheld computer than a calculator. Many of the commands for PCs can be used on the Nspire.

- **Copy**: (ctrl) C
- **Paste:** (ctrl) V
- **Cut:** (ctrl) X
- **Insert New Page:** (ctrl) I
- **Right Click:** (ctrl) (menu)
- **Common Symbols:** (π)
- **Make a Quick Calculation:** (=)
- **Open Doc:** (ctrl) O
- **Create New Doc:** (ctrl) N
- **Document Properties:** (doc)
- **Get out of Trouble:** (esc)

System Settings



There are two major setting menus that you need to be aware of: Systems Settings & Document Settings.

- To access settings, go to (on) and then press 5.
- Choose Settings and choose General.

This is the system settings menu and allows you adjust the system to meet your needs. See the explanations in the next column.

- **Display Digits**: affects the number of decimal places
- **Angle**: Choose between degree, radian, or gradians. You will most often use degrees.
- **Exponential Format**: Allows you to switch between scientific notation and standard.
- **Real or Complex**: Leave this set to Real.
- **Calculation Mode**: The Calculator is automatically set to simplified form. You can set it to give you a decimal answer.
- Don't change any of the other settings.

Graphing with TI Nspire

Graphing Reference Activities for TI Nspire

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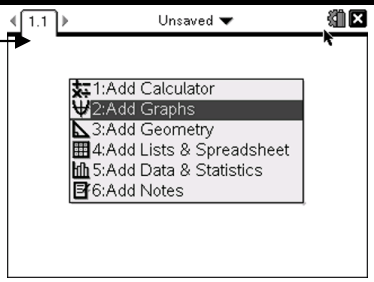
Graphing Functions

- To start a graph, create a new page and choose "2: Add Graph"
- If the Entry Line isn't visible, click on the double arrows at the lower left.
- Type in the equation that you want to graph and hit enter.
- To add another graph, click on the double arrows and type the equation next to f2(x).

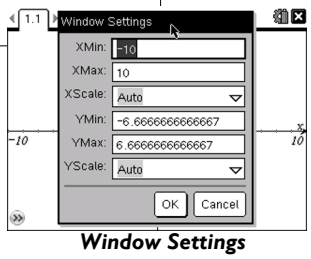


Window Settings

You can adjust the width and height of your viewing screen by changing your window settings.

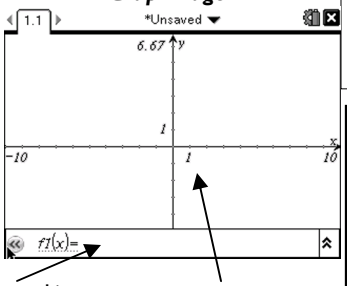
Graph f(x) = (2/3)x—15 on your graph page. It may appear that nothing is on your screen. That is because the window settings are not appropriate for this graph.

- To change your window, press (menu) and choose "4: Window/Zoom" and then choose "1: Window Settings"
- The xmin and xmax affect the width of your screen.
- The ymin and ymax affect the height of your screen.
- xScale and yScale allow you to determine how you want the tick marks spaced. xScale and yScale do not need to be the same values.



Window Settings

Graph Page



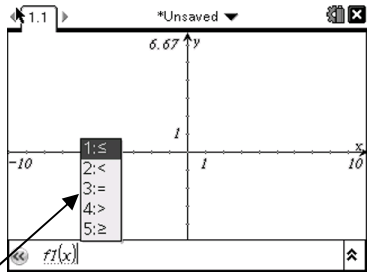
Entry Line

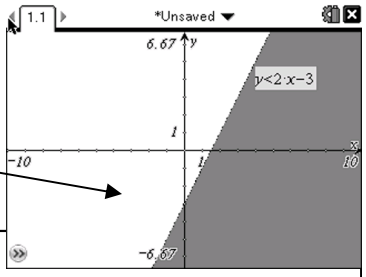
Step Value

Graphing Linear Inequalities

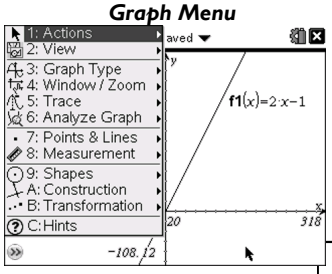
The TI Nspire operating system now has the capabilities of graphing linear inequalities including dashed lines and shading. Follow the instructions to the right to graph inequalities.

- Create a new graph page.
- In the Entry Line, delete the equal sign in front of f1(x).
- Choose the inequality symbol you want by clicking on it.
- Type out the rest of the inequality and then hit enter.
- f(x) < 2x—3 is shown as an example.



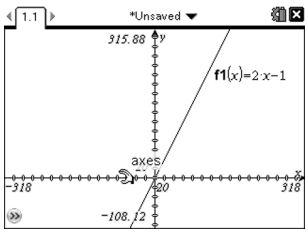


Graph Menu



Other Graph Options

Image for Manual Window Change



Trace

Trace allows you get multiple coordinates on the graph simply by pressing the left and right buttons.

- To trace a graph, press (menu) and then "5: Trace".
- Then choose "1: Graph Trace". The calculator will start tracing at the y-intercept by default.
- Move the trace point by pressing left or right using the keypad.

Manual Window Change

You can quickly change your window manually using the touchpad.

- Move the cursor over the axes until the word "axes" appears next to the cursor.
- Click using the touchpad. This allows you to *grab* the axis.
- Now move your cursor left or right to zoom in or zoom out.

Manual Step Change

You can also manually set the step increases for each axis.

- Move your cursor over the step value until you see the word "text".
- A text box will open when you double click.
- Delete the present value and replace it with the value that you want.

More Graphing with TI Nspire

Extra Graphing Reference Activities for TI Nspire

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Analyze Graph Menu

Zero—Determines the value of the x-intercept.

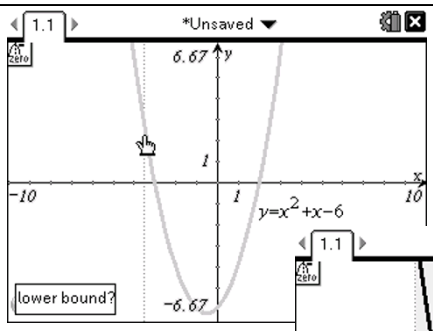
Min—Determines the coordinates of the minimum of a polynomial.

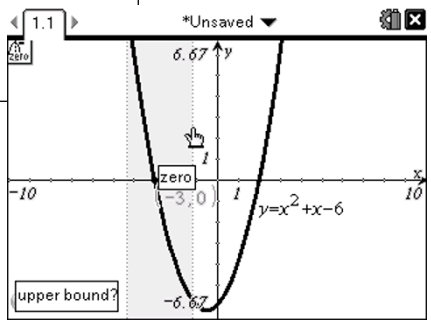
Max—Determines the coordinates of the maximum of a polynomial.

The process for each of these tools is exactly the same.

Use $f(x) = x^2 + x - 6$ as a model for finding the zero.

- Graph the function.
- Press (menu) and choose "6: Analyze Graph"
- Choose "1: Zero"
- Move your cursor to the left of the zero (lower bound) and click or hit enter.
- Move your cursor to the right of the zero (upper bound) and click or hit enter.
- The coordinates of the zero will appear.



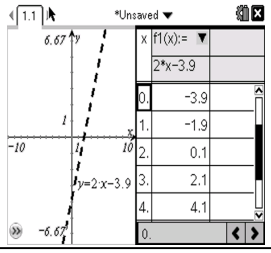


Inserting Table of Values

You can view a table of values and the graph simultaneously. To view a table of values for a graph, press (menu).

Choose "2: View"

Then choose "9: Show Table".



Moving & Changing the Graph

- You can change the graph by double clicking on label.
- To move the graph, place your cursor over your graph and press (ctrl) and then click.
- Use the touchpad to move the graph.
- Notice that the equation changes simultaneously with moving the graph.

Graph Page Quick Commands

(ctrl) + G: Show/Hide Entry Line

(ctrl) + Click: Grab Object

(ctrl) + T: Show/Hide Table of Values

(ctrl) + Z: Undo

Graph Attributes

You can change how your graph looks by changing the graph attributes.

- Move your cursor over your graph and press (ctrl) (menu).
- Choose "3: Attributes".
- Change each attributed by selecting what you want to change and pressing left or right.

Weight: Changes the thickness of the graph

Line Style: Switches between solid, dashed, and dotted lines

Label Style: Changes between "y =" and "f(x) ="

Graph Continuous: Changes between continuous graph and a few plotted points