

# TI-Nspire™ CX II Online Calculator Guidebook

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# TI-Nspire™ CX II Online Calculator

TI-Nspire™ CX II online calculator is a standalone web-based application that provides the basic functionality of the TI-Nspire™ CX II graphing calculator on any compatible computer.

#### **Supported Calculators**

TI-Nspire™ CX II (non-CAS)

#### Image Disclaimer

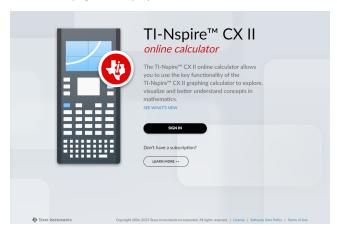
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## **Getting Started**

- 1. Open a compatible browser.
- 2. Enter nspirecxii.ti.com into the address bar.

If prompted, click Agree and Proceed to accept cookies, and then click ACCEPT button to agree with the TI terms and conditions.

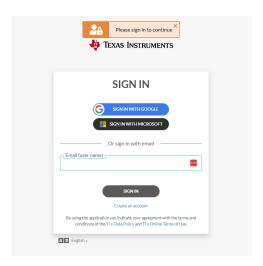
A compatibility check will be performed while the application loads. If any issues are found, a page will display with information on what needs to be addressed.



Note: Click LEARN MORE to view licensing and other information on the TI Education Technology website.

3. Click the SIGN IN button.

The Texas Instruments SIGN IN dialog will display.



4. Enter your Texas Instruments account sign in credentials.

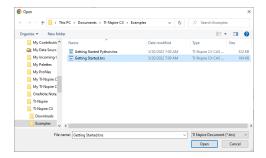
When the document prompt displays, you can select to open an existing .tns file or create a new one.



Note: You can only create or open one .tns file at a time.

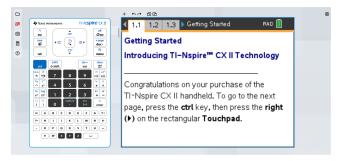
#### To open an existing document from your computer

- 1. Click the **OPEN DOCUMENT FROM COMPUTER** button.
- 2. On the Open dialog box, locate and select the document.



## 3. Click Open.

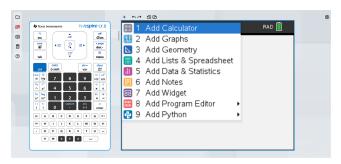
The document will open in the workspace.



#### To create a new document

► Click the **CREATE A NEW DOCUMENT** button.

The calculator workspace is displayed with the app menu open.

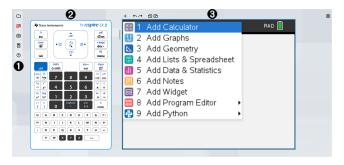


# Using the Calculator Workspace

The TI-Nspire™ CX II online calculator workspace has three main areas:

1 Function Bar

- 2 Calculator Keypad
- 3 Calculator Workspace

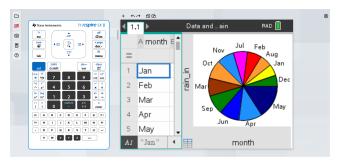


#### **Screen Focus**

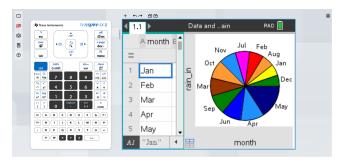
When you are working with the calculator, the area of the screen you were last interacting with is highlighted with a blue outline. Any keystrokes or keyboard shortcuts will only affect that part of the screen, if available.

You can change the focus by clicking on one side or the other.

Focus on the calculator keypad:



#### Focus on the calculator screen:



#### **Function Bar**



- Document menu
  - **New Document**
  - Open from Computer
  - Save to Computer
  - Close Document

See Managing Documents for more information.

2 Large Screen: Allows you to toggle between the default large screen view and the full calculator view.



- **Screen Capture:** Allows you to capture the calculator screen for use in other apps. See Capturing the Calculator Screen for more information.
- Connectivity: Launches the TI-Nspire™ CX II Connect app in a new tab where you can connect your TI-Nspire™ CX II graphing calculator to capture screens, transfer .tns files, and update the OS.
- 6 Help menu
  - Help (Online)
  - Visit Resources
  - About TI-Nspire CX II

#### **Document Tools**



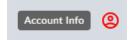
- **1** Insert: Allows you to insert a problem, page, or app in the document.
- **Q** Undo/Redo: Allows you to undo or redo the previous action.
- **?** Previous Page/Next Page: Allows you to navigate between pages in your document.

#### Resize Bar



You can move the resize bar left or right to dynamically change the size of the keypad and work area to meet your needs.

#### **Account Info and Sign Out**



Clicking the Account Info icon (2) will open a dialog box that displays basic information about your account.

- Account Info: Your Texas Instruments account email address/user name.
- **Subscription Expiration:** The date your Texas Instruments subscription will expire.
- SIGN OUT button: Signing out will disconnect you from any Texas Instrument product your account has access to.

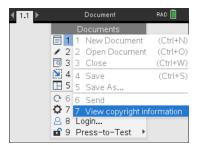
Click anywhere on the screen other than the **SIGN OUT** button or press the **esc** button on your keyboard to return to the calculator workspace.

# **Managing Documents**

Document management with the TI-Nspire™ CX II online calculator is slightly different than on the graphing calculator. Since your work is based in a browser session, there is no active file in use.

Therefore, the New, Open, Save, and Close functions are performed with the Function Bar instead of the **Documents > File** menu options or the X button. Those options have been disabled in the File menu and the X has been removed from the top right corner as shown below.





**CAUTION:** Any changes you make to a document **are not auto-saved**. They only exist in the current browser session. You must manually save them (see the **Save to Computer** section below) in order to capture any changes since the last save.

#### Also note that:

- Each document is divided into at least one, and up to 30, problems.
- Each problem contains at least one, and up to 50, pages.
- Each page can be divided into as many as four work areas.
- Each work area can contain any of the TI-Nspire<sup>™</sup> applications (Calculator, Graph, Geometry, Lists & Spreadsheet, Data & Statistics, Notes, Program Editor, and Python).

#### **New Document**

**Note:** These steps are for the workspace page. You can also create a new document on the Document Prompt page.

#### To create a document

- 1. Click the **Document** icon on the Function Bar.
- 2. Click New Document.

The workspace will refresh and display an empty document.

#### **Open from Computer**

**Note:** These steps are for the workspace page. You can also open an existing document on the Document Prompt page.

#### To open a document

- 1. Click the **Document** icon on the Function Bar.
- 2. Click Open from Computer.
- 3. Select the file you want to open and click **Open**.

The workspace will refresh and display the document you chose.

## **Save to Computer**

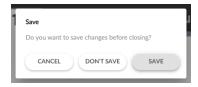
#### To save a document

- 1. Click the **Document** icon on the function bar.
- 2. Click Save to Computer.
- 3. Select the location where you want to save the document.
- 4. Enter a name for the document and click Save.

If you use an existing document name, you will be prompted to overwrite the document.

If there are unsaved changes to your document, you will be prompted to save that document if you try to:

- create a new document,
- · open an existing document,
- or close the current document.



If you try to close or reload the browser tab or window, a browser dialog box will display indicating that there are unsaved changes. You can then choose whether to continue without saving, or cancel and save the latest changes.

#### **Close Document**

#### To close a document

- 1. Click the **Document** icon on the function bar.
- 2. Click Close Document.

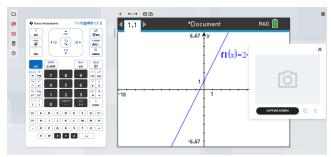
You will be returned to the Document Prompt page to open a document from your computer or create a new document.

# Capturing the Calculator Screen

After creating content in one of the calculator apps, you can capture the calculator screen to save or share with others.

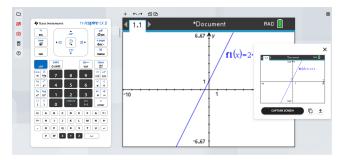
#### To capture the calculator screen

1. Click the **Screen Capture** oi icon on the Function Toolbar.



2. Click the CAPTURE SCREEN button.

The current calculator screen will display.

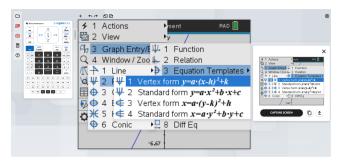


**Note:** You can only capture one screen at a time. To capture another screen, make the necessary changes on the calculator and click the **CAPTURE SCREEN** button again.

- 3. Click one of the following buttons:
  - Copies the current screen to the computer clipboard and use the image in other apps.
    - ◆ Saves the current screen to your computer.

You can also drag-and-drop the image to other apps like Google docs, Microsoft Word, etc.

**Tip:** To see the entire calculator workspace while capturing the screen, use the Resize Bar to shrink the size of the keypad until the workspace is no longer blocked by the screen capture popup.



# TI-Nspire™ CX II Online Calculator Keys

Use the calculator keypad as you would the TI-Nspire™ Touchpad.

esc Removes menus or dialog boxes from the screen. Also stops a calculation in progress.

্রেকা Displays the home screen.

doc v Opens the Document menu.

Opens the Scratchpad for performing quick calculations and graphing.

menu Displays the application or context menu.

tab Moves to the next entry field.

Deletes the previous character.

Shift Makes the next character typed upper-case.

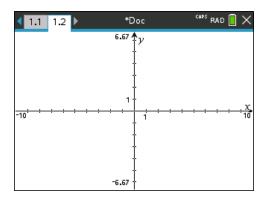
war Displays stored variables.

etrl Provides access to the function or character shown above each key. Also enables shortcuts in combination with other keys. enter Evaluates an expression, executes an instruction, or selects a menu item.

Note: A > symbol on a key indicates access to multiple options. To access an option, press ?! repeatedly or use the arrow keys on the calculator keypad. Press enter or click to select the option.

# The TI-Nspire™ CX II Online Calculator Screen

When you are working in a document, icons at the top of the screen provide information about the status of operations and provide an easy way to change settings. The icons are described below.



	Icon	Function	
	Page scrolling arrows - Use the calculator keypad to click these arrows and scroll through the pages in a document.		
Page tab - Labels the problem number and page number of the ac For example, a label of 1.2 identifies Problem 1, Page 2. If problem named, hover the pointer over a tab to view the page name.		Page tab - Labels the problem number and page number of the active page. For example, a label of 1.2 identifies Problem 1, Page 2. If problems are named, hover the pointer over a tab to view the page name.	

Icon	Function	
*Doc	<b>Document name</b> - Shows the current document name. An asterisk by the document name indicates changes were made since the document was last saved. Click the name to open the <b>Documents</b> menu.	
CAPS	Shows status of the (reshift), [ctrl], and [CAPS] keys.	
RAD	Angle Mode - Shows an abbreviation of the angle mode (Degrees, Radians, or Gradians) in effect. Hover the pointer over the indicator to see the full name.  Note: Click the indicator to toggle between RAD and DEG modes.	
	Settings & Status - Click the icon to open the Settings & Status menu.	

# **Using Hints**

**Hints** are quick tips available throughout the software. There are several easy ways to access Hints:

- Press ctrl trig.
- Some dialog boxes contain a question mark icon. Click this icon to open Hints for that task.

To scroll through the Hints, use the Touchpad or arrow keys:

- To page down, press ctrl 3.
- To page up, press ctrl 9.
- To go to the end of the Hints file, press ctrl 1.
- To go back to the beginning of the file, press ctrl 7.

# **Using the Scratchpad**

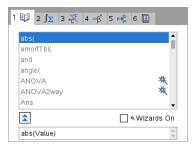
The Scratchpad is a feature of the TI-Nspire™ CX II online calculator that lets you quickly:

- Evaluate math expressions.
- · Graph functions.

## Inserting Items from the Catalog

You can use the Catalog to insert functions and commands, symbols, and expression templates into the entry line.

1. Press (a) to open the Catalog. By default, the first tab is displayed, which lists all commands and functions in alphabetical order.



- If the function you are inserting is visible in the list, select it and press enter to insert it.
- 3. If the function is not visible:
  - a) Press a letter key to jump to the entries that begin with that letter.
  - b) Press or as necessary to highlight the item you are inserting.
  - Click a numbered tab to list functions by category: math functions, symbols, math templates, library objects, and value for standard measurement units.
  - d) Press enter to insert the item into the entry line.

#### **Using an Expression Template**

Templates help you enter matrices, piecewise functions, systems of equations, integrals, derivatives, products, and other math expressions.

$$\sum_{n=0}^{\infty} (n)$$

For example, suppose you want to evaluate n=3

1. Press open the Template palette.

2. Select to insert the algebraic sum template.

The template appears on the entry line with small blocks representing elements that you can enter. A cursor appears next to one of the elements to show that you can type a value for that element.



3. Use the arrow keys to move the cursor to each element's position, and type a value or expression for each element.



4. Press enter to evaluate the expression.

$$\frac{7}{\sum_{n=3}^{7} (n)}$$

#### **Inserting Expressions Using a Wizard**

You can use a wizard to simplify entering some expressions. The wizard contains labeled boxes to help you enter the arguments in the expression.

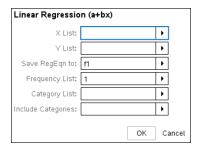
For example, suppose you want to fit a y=mx+b linear regression model to the following two lists:

- 1. Press 🕮 🚺 to open the Catalog and show the alphabetic list of functions.
- 2. Click inside the list, and then press [L] to jump to the entries that begin with "L."
- 3. Press **▼** as necessary to highlight **LinRegMx**.
- 4. If the Wizards On option is not checked, press tab to highlight Wizards On.
- 5. Press enter to change the setting.
- 6. Press tab to highlight LinRegMx again.



7. Press enter.

A wizard opens, giving you a labeled box to type each argument.

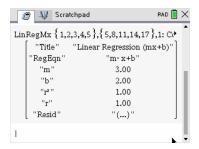


- 8. Type {1,2,3,4,5} as X List.
- 9. Press tab to move to the Y List field.
- 10. Type {5,8,11,14,17} as Y List.
- If you want to store the regression equation in a specific variable, press tab, and then replace Save RegEqn To with the name of the function variable (f1 through f99).
- 12. Click **OK** to close the wizard and insert the expression into the entry line.

The expression is inserted along with statements to copy the regression equation and display the variable *stat.results*, which will contain the results.

LinRegMx {1,2,3,4,5},{5,8,11,14,17},1: CopyVar stat.RegEqn,f1: stat.results

The Scratchpad then displays the *stat.results* variables.

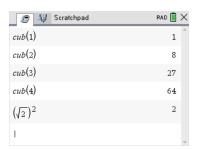


Note: You can copy values from the stat.results variables and paste them into the entry line.

# Viewing the History

Each evaluated expression and result becomes part of the Scratchpad history, displayed above the entry line.

Press  $\triangle$  or  $\nabla$  to scroll through the history.



#### Copying a History Item to the Entry Line

You can quickly copy an expression, subexpression, or result from the history into the entry line.

- 1. Press ▲ or ▼ to move through the history and select the item that you want to copy.
- 2. Optionally, select part of the expression or result by using fishift in combination with the arrow keys.



3. Press enter to copy the selection and insert it into the entry line.

	$2^{8} \cdot 12$	$16 \cdot \sqrt{14}$
\	42	7

## **Clearing the History**

When you clear the history, all variables and functions defined in the history retain their current values. If you clear the history by mistake, use the undo feature.

From the Actions menu, click Clear History.

-or-

Press menu 1 5.

All expressions and results are removed from the history.

# **Editing Scratchpad Expressions**

Although you cannot edit a Scratchpad Calculate expression in the history, you can copy all or part of an expression from the history and paste it to the entry line. You can then edit the entry line.

## Inserting Elements into the Entry Line

1. Press tab, ♠, ♠, or ▼ to position the cursor in the expression.

The cursor moves to the closest valid position in the direction that you press.

2. Type the elements or insert them from the Catalog.

# **Selecting Part of an Expression**

You can delete, cut, or copy a selected part of an expression.

- 1. Press **﴿**, **▶**, **▲**, or **▼** to move the cursor to a starting point in the expression.
- 2. Press and hold �shift and press ♠, ▶, ▲, or ▼ to select.
  - To delete the selection, press del.
  - To cut the selection to the Clipboard, press ctrl X.
  - To copy the selection to the Clipboard, press ctrl C.
  - To paste the selection to a new entry line in Scratchpad, press [tr] V.

# Graphing with the Scratchpad

1. Press 📕 to open the Scratchpad Graph page if it is not already open.

By default, the entry line is displayed. The entry line displays the required format for typing a relation. The default graph type is Function, so the form f1(x)= is displayed.

If the entry line is not shown, press Ctrl + G or press menu 2 3 to display th
entry line and type an expression to graph.

2. Press menu > Graph Entry/Edit and select a graph type.

For example:

- To graph an equation for a circle, press menu > Graph Entry/Edit > Equation > Circle >  $(x-h)^2 + (v-k)^2 = r^2$  or press menu 3 2 3 1. Fill in the equation and press enter to draw the circle.
- To graph a function, press menu > Graph Entry/Edit > Function or press menu 3 1.

The entry line changes to display the expression format for the specified graph type. You can specify multiple relations of each graph type.

3. Type an expression and any other parameters required for the graph type.



you can use press menu 4 to choose a tool on the Window/Zoom menu and adjust the viewing area.

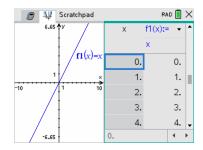
When you graph the relation, the entry line disappears to show an uncluttered view of the graph. If you select or trace a plot, the relation that defines the plot is displayed on the entry line. You can modify a plot by defining a relation or by selecting and changing the graph.

As you graph multiple plots, the defining relation is displayed for each. You can define and graph a maximum of 99 relations of each type.

- 5. Use the menu key to explore and analyze the relation to:
  - Trace the relation.
  - Find points of interest.
  - Assign a variable in the expression to a slider.

#### Viewing the Table

► To display a table of values corresponding to the current plots, press menu > Table > Split-screen Table (menu 7 1).



- ► To hide the table, click the graph side of the split screen, and then press menu > Table > Remove Table ([menu] [7] [2]). You can also press Ctrl + T.
- ► To resize columns, click the table and press menu > Actions > Resize (menu 1 1).
- ► To delete a column, edit an expression, or edit table settings, click the table and press menu > Table (menu 2).

#### Changing the Appearance of the Axes

As you work with graphs, the Cartesian axes are displayed by default. You can change the appearance of the axes in the following ways:

- 1. Press menu 4 and choose the Zoom tool to use.
- 2. Select the axes and press ctrl menu 2 to activate the Attributes tool.
  - a) Press ▲ or ▼ to move to the attribute to change. For example, choose the end style attribute.

  - c) Change any other attributes of the axes as required for your work, and then press enter to exit the attributes tool.
- 3. Adjust the axes scale and tic mark spacing manually.
  - a) Click and hold one tick mark, and move it on the axis. The spacing and number of tic marks increases (or decreases) on both axes.
  - b) To adjust the scale and tic mark spacing on a single axis, press and hold @shift, and then grab and drag a tic mark on that axis.
- 4. Change axis end values by double-clicking them and typing new values.
- Adjust the location of the axes. To move the existing axes without resizing or rescaling them, click in and drag an empty region of the screen until the axes are in the desired location.
- 6. Change the axes' scales by pressing menu > Window/Zoom > Window Settings (menu 4 1).

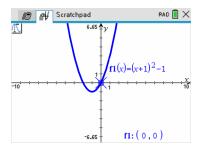
Type the values of your choice over the current values for x-min, x-max, y-min, y-max, Xscale, and Yscale and click **OK**.

- 7. Press menu > View > Hide Axes (menu 2 1) to hide or show the axes.
  - If the axes are shown on the page, selecting this tool hides them.
  - If the axes are hidden on the page, selecting this tool redisplays them.

#### Tracing a Plot

Graph Trace moves through the points of a graphed function, parametric, polar, sequence, or scatter plot. To enable the trace tool:

 Press menu > Trace > Graph Trace (menu 5 1) to move across the plot in Trace mode.



2. (Optional) To change the trace step increment for tracing, press menu [5] [3].

After you type a different step increment, the Graph Trace tool moves across the graph in steps of that size.

- 3. Use Graph Trace to explore a plot in the following ways:
  - Move to a point and hover to move the trace cursor to that point.

  - Press ▲ or ▼ to move from one plot to another. The point's coordinates update to reflect the new location of the trace. The trace cursor is positioned on the point of the new graph or plot with the closest x value to the last point identified on the previously traced function or graph.
  - Type a number and press <a href="enter">enter</a> to move the trace cursor to the point on the plot with independent coordinates nearest the typed value.
  - Create a persistent point that remains on the graph by pressing <a href="mailto:enter">enter</a> when the trace point reaches the point you want to label. The point remains after you exit Graph Trace mode.

#### Notes:

- The string *undef* is displayed instead of a value when you move over a point that is not defined for the function (a discontinuity).
- When you trace beyond the initially visible graph, the screen pans to show the area being traced.
- 4. Press esc or choose another tool to exit Graph Trace.

## **Finding Points of Interest**

You can use the tools on the Analyze Graph menu to find a point of interest in a specified range of any graphed function. Choose a tool to find zero, the minimum or maximum, the point of intersection or inflection, or the numeric derivative (dy/dx) or Integral on the graph.

1. Select the point of interest that you want to find on the Analyze Graph menu. For example, to find a zero, press menu 6 1.

Zero	menu 6 1
Minimum	menu 6 2
Maximum	menu 6 3
Intersection	menu 6 4
Inflection	Not applicable
dy/dx	menu 6 5
Integral	menu 6 6
Analyze Conics	menu 6 7

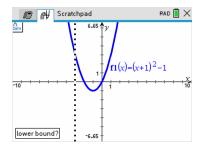
The icon for the selected tool is displayed at the top left on the work area. Point to the icon to view a tooltip about how to use the selected tool.

2. Click the graph you want to search for the point of interest, and then click a second time to indicate where to start the search for the point.

The second click marks the lower bound of the search region and a dotted line is displayed.

Note: If you are finding the derivative (dy/dx), click the graph at the point (numeric value) to use for finding the derivative.

3. Press ◀ or ▶ to move the dotted line that marks the search region, and then click the point at which you want to stop the search (upper bound of the search region).



4. Press enter at the point to start the search. The tool shades the range.

If the search region you specified includes the point of interest, a label for the point is displayed. If you change a graph that has points of interest identified, be sure to check for changes in points of interest. For example, if you edit the function on the entry line or manipulate a plot, the point where the graph intersects zero can change.

The labeled points of interest remain visible on the graph. You can exit the tool by pressing [esc] or choosing another tool.

# Working with Documents on the TI-Nspire™ CX II Online Calculator

All of the work you do with the TI-Nspire™ CX II online calculator is contained in one or more TI-Nspire™ documents, which you can share with other users and with those using the computer software.

- Each document is divided into at least one, and up to 30, problems.
- Each problem contains at least one, and up to 50, pages.
- Each page can be divided into as many as four work areas.
- Each work area can contain any of the TI-Nspire™ applications (Calculator, Graph, Geometry, Lists & Spreadsheet, Data & Statistics, and Notes).

## **Working with Applications**

Options for working with applications include:

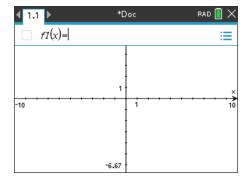
- Creating a new document and selecting an application
- Adding a new page and application to an open document
- Adding multiple applications to a page in a document

## **Adding an Application**

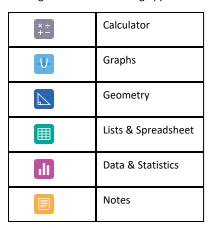
There are multiple ways to add an application to a page:

- When creating a new document, use the Touchpad or corresponding numbers to select an application from the list of applications.
- To add a new page and application to an open document, press ctrl docr and then select an application from the list.

For example, press 2 to add the Graph application to the page. The application opens in the work area.



You can also press (命), and then select an application from the Home screen by clicking one of the following application icons:



## Using Multiple Applications on a Page

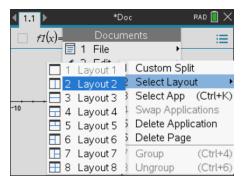
You can add up to four applications to each page.

When you create a new document, it contains space to add one application. If you need to add more than one application to a page, you can change the layout to accommodate as many as four applications.

You can choose a standard layout, provided as a menu item, or you can customize a layout to suit your needs.

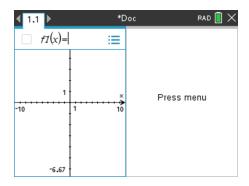
#### Choosing a Standard Page Layout

Press doc > 5 2 to display layout options. 1.

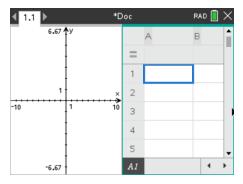


2. Press the number that corresponds to the layout you want.

For example, press 2 to create a two-pane layout, divided vertically on the page.



- 3. Press ctrl tab to move between panes. Bold lines around the pane indicate that the pane is active.
- 4. Press menu, and then press the number of the application you want to add the new pane. For example, press 4 to add the Lists & Spreadsheet application.

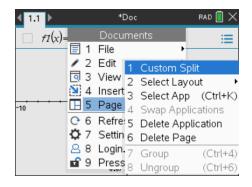


**Note:** If you need to change the layout of the page to add or delete applications, you can do so at any time. When deleting an application, select the application to be deleted first.

#### Creating a Custom Page Layout

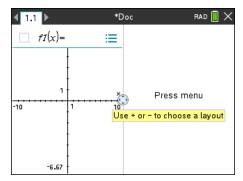
If the standard layouts do not meet your needs, you can customize the space allotted to applications on a page.

1. Press doc 5 to display layout options.



2. Press 1 to select the custom split option.

The standard layout is displayed with a divider between the application panes. Use the arrows ( ) in the middle of the divider to adjust the size of the panes.



- Press ▲, ▼, ♠, or ▶ to move the divider to adjust the height or width of the panes in the layout.
- 4. Press + or to select a defined layout:
  - Pressing returns to a full page layout.
  - Pressing + once switches layout from a vertical layout to a horizontal layout.
     Press to go back to a vertical layout.
  - Pressing + twice adds a third pane to the page. Pressing + multiple times
    enables you to choose between a vertical and horizontal page layout with three
    panes.
  - Pressing + five times adds a fourth pane to the page. Press to cycle through the previous layout options.
- 5. Press or enter to accept the layout dimensions.

6. Press ctrl tab to move between panes. Bold lines around the pane indicate that the pane is active.

## Swapping Applications on a Page

If you want to change the position of applications on a page with multiple applications, you can do so by "swapping" the positions of two applications.

1. Press docv 5 Page Layout 4 Swap Application.

The selected application is surrounded by a heavy, flashing black border, and the Swap App cursor 45 is displayed on the screen.

**Note:** On a two-pane page layout, the selected application automatically swaps position with the opposite pane. Press or enter to complete the swap.

- Press ▲, ▼, ◀, or ▶ to position the cursor over the application you are targeting to swap.
- 3. Press or enter to complete the swap.

Note: Press esc to cancel the swap.

## **Grouping Applications**

To group up to four application pages into a single page:

- 1. Select the first page in the series.
- 2. From the **Document** menu, select **Page Layout > Group**.

Press doc ▼ 5 7.

The next page is grouped with the first page. The page layout automatically adjusts to display all the pages in the group.

## **Ungrouping Pages**

To ungroup the pages:

- 1. Select the grouped page.
- 2. From the **Document** menu, select **Page Layout > Ungroup**.

-or-

Press doc ▼ 5 8.

The material becomes individual pages for each application.

## Deleting an Application from a Page

- Click the application you want to delete.
- 2. From the **Document** menu, select **Page Layout > Delete Application**.

-or-

Press doc v 5 5.

The selected application is deleted.

If you want to undo the delete, press Ctrl-Z.

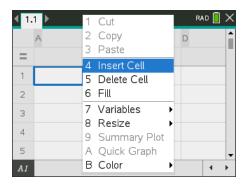
#### Context Menus

Context menus display options that are specific to the selected object or the current cursor location.

#### Using the Context Menu

To access a context-sensitive menu from an application, press ctrl menu.

In the example below, the context menu displays options available for the selected cell in Lists & Spreadsheet.



# Working with Problems and Pages

The options on the **Documents** menu let you:

Save a document

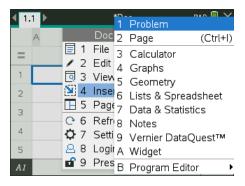
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- Access edit functions such as undo, redo, cut, copy, paste, and delete
- Move between pages and open the page sorter view for documents with multiple pages
- Modify page layout, insert pages or problems, delete pages, and change settings
- Add problems, pages, and applications to open documents
- Access page layout options

# Adding a Problem to a Document

Adding problems to a document enables you to reuse variable names. A document can contain as many as 30 problems. To add a new problem:

Press docv 4 1 to open the Insert options.



A new problem with one page is added to the document. The tab at the top left of the screen indicates that this is the first page of the second problem.



 Press menul to open the Application menu, and then, press the number corresponding to the application you want to add to the new page.

# Viewing and Reordering Pages in a Document

The Page Sorter displays all of the problems in your document and all pages within each problem in thumbnail format. You can use the Page Sorter to rearrange and delete pages, copy a page from one problem and paste it into another, and apply templates to pages.

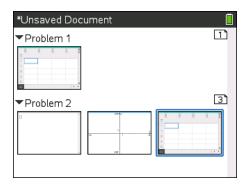
## Viewing Multiple Pages with the Page Sorter

Although the online calculator typically displays the pages in your document one at a time, the Page Sorter lets you see all of the problems in your document and all pages within each problem in thumbnail format. You can use the Page Sorter to rearrange and delete pages, and copy a page from one problem and paste it in another.

#### Opening the Page Sorter from a Document

▶ Press ctrl ▲.

The Page Sorter screen displays all of the problems and pages in the current document.

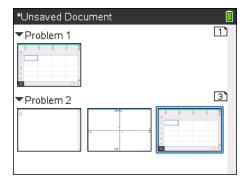


## Reordering Pages in a Problem

Use the Page Sorter (press ctrl  $\triangle$ ) to move a page within a problem with multiple pages:

1. Press the ◀ or ▶ key to select the page you want to move.

A heavy border around the page indicates that it is selected.



- 2. Either press and hold a or press or a until the grab cursor is displayed.
- 3. Press  $\langle , \rangle$ ,  $\triangle$ , or  $\nabla$  to move the page to the desired position.
- 4. Press or enter to finish the move.

Note: You can press esc to cancel.

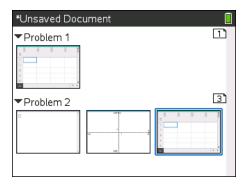
The page moves to the new location within the problem, and the counter adjusts accordingly.

#### Copying a Page to Another Problem

To copy a page from one problem to another in the same document:

- 1. Press ctrl ▲ to open Page Sorter.
- 2. Press  $\P$ ,  $\P$ ,  $\P$ , or  $\P$  to select the page you want to copy.

A heavy border around the page indicates that it is selected.



- 3. Press ctrl C to copy the page.
- Press ♠, ▶, ▲, or ▼ to select the desired position in the problem where you will
  paste the page. The copied page will be placed after the page you select.
- 5. Press ctrl **V** to paste the page in the new location.

The page is copied to the new location within the problem, and the counter adjusts accordingly.

**Note:** If the page contains variables with the same names as the new problem, a conflict may occur. Rename the variables if necessary.

#### Copying a Page to Another Document

To copy a page from one document to another document:

- 1. Press ctrl ▲ to open the Page Sorter.
- 2. Press  $\P$ ,  $\searrow$ , or  $\checkmark$  to select the page you want to copy.

A heavy border around the page indicates that it is selected.

- 3. Press ctrl C to copy the page.
- 4. Press Gon 2 to open My Documents.
- Press ▲ and ▼ to highlight the folder containing the document you want to copy the page to.
- 6. Press ▶ to open the folder.

-or-

Press menu 3.

- 7. Press the ▲ and ▼ keys to highlight the document.
- 8. Press or enter to open the document.
- 9. Press ctrl ▲ to display the Page Sorter.
- 10. Press  $\langle , \rangle$ ,  $\triangle$ , or  $\nabla$  to move the page to the desired position in the document.
- 11. Press ctrl **V** to paste the page in the new location.

The page moves to the new location within the problem, and the counter adjusts accordingly.

# Understanding the TI-Nspire™ Tools

This section provides an overview of the tools used when working with TI-Nspire™ documents including variables, catalog, symbols, and math templates.

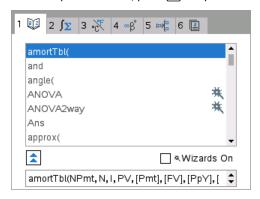
## Creating TI-Nspire™ Variables

Variables can be any portion or attribute of an object or function created within an application. Examples of attributes that can become variables are the area of a rectangle, the radius of a circle, the value contained in a spreadsheet cell or the contents of a column, or a function expression. When you create a variable, it is stored in memory within the problem. You will find more information about variables in the chapter titled *Using Variables*.

#### Using the Catalog

Use the catalog to access a list of TI-Nspire™ commands and functions, units, symbols and expression templates. Commands and functions are listed alphabetically. Commands or functions not beginning with a letter are found at the end of the list (&, /, +, -, and so on). To open the catalog:

1. From an open document, press (a) to open the catalog.



2. Press the number key corresponding to the appropriate tab.

For example, press [2] to show a list of math functions.

3. Press ▼ until the item you want to insert is highlighted.

A syntax example for the selected item is displayed at the bottom of the screen.

Note: To see additional syntax examples of the selected item, press [tab], and then press [enter] to maximize or minimize the Help. To move back to the selected item, press [4] shift] [tab].

4. Press enter to insert the item.

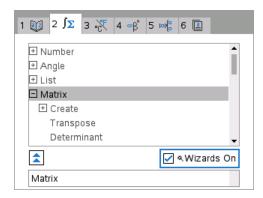
## **About the Catalog Window**

The catalog window uses these tabs to categorize commands, special characters, and templates in documents:

1 [2]	Contains all commands and functions, in alphabetical order
2 ∫Σ	Contains all math functions
3 %	Provides the values for standard measurement units
4 ∞β°	Provides a symbol palette for adding special characters
5 🗝 🖁	Contains math templates for creating two dimensional objects, including product, sum, square root, and integral
6 🖺	Shows public library (LibPub) objects.

#### Using Wizards

Some catalog functions have a wizard to help you enter function arguments. To use a wizard, press tab until the **Wizards On** box is highlighted. Press or enter to select the check box.



#### **Entering Special Characters**

The symbol palette contains a subset of the objects found in the catalog. To open the symbol palette:

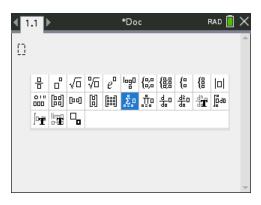


- 2. Press  $\P$ ,  $\searrow$ , or  $\checkmark$  to select a symbol.
- 3. Press enter to insert the symbol.

#### **Entering Math Expressions**

Use math expression templates to create two-dimensional objects such as summation, integral, derivative, and square root. To open the math expressions palette:

1. In an open document, press [16].



- 2. Press ♠, ▶, ▲, or ▼ to select an expression.
- 3. Press or enter to insert the expression.

#### **Entering International Language Characters**

Use the  $\bigcirc$  key to enter specially accented or punctuated characters in applications such as Notes that allow text input.

- 1. Open an application such as Notes that allows text input.
- 2. Type the desired text.
- 3. Position the cursor after the letter that you want to accent. For example, "e" while in the French locale.
- 4. Press P on the keypad. Notice that the "e" changes to "é." Keep pressing P until you find the accented version of e that you want. Press or the next letter of your text to accept the character and continue typing.

# **Keyboard Shortcuts**

Use the keypad mapping to computer keyboard for Windows®, Mac®, and Chromebook™.

You can use your computer keyboard to press a key instead of pressing that key on the TI-Nspire™ CX II online calculator keyboard image.

**Note:** Mac<sup>®</sup> users should substitute  $\mathcal{H}$  (Cmd) anywhere ctrl is used.

Keys	Function	Keypad	Computer Keyboard
alt + enter	Add a row to a matrix	Not supported	Yes
ctrl + 0	Scratchpad or toggle between Scratchpad apps	Not supported	Yes

Keys	Function	Keypad	Computer Keyboard
ctrl + 1	Move to end of list/page down	Yes	Yes
ctrl + 2	End of line	Yes	Yes
ctrl + 3	Page down	Yes	Yes
ctrl + 4	Merge two pages into split screen.	Yes	Yes
ctrl + 6	Convert split screen into two pages	Yes	Yes
ctrl + 7	Move to top of list/page up	Yes	Yes
ctrl + 8	Beginning of line	Yes	Yes
ctrl + 9	Page up	Yes	Yes
ctrl + A	Select all	Yes	Yes
ctrl + B	Check Syntax and Store	Yes	Yes
ctrl + C	Сору	Yes	Yes
ctrl + E	Insert a Chem Box	Yes	Yes
ctrl + F	Find	Yes	Yes
ctrl + G	Toggle Graph Entry Line	Yes	Yes
ctrl + G	Go to cell/Go to line	Yes	Yes
ctrl + H	Find and Replace	Yes	Yes
ctrl + I	Insert page	Yes	Yes
ctrl + J	Take screen capture	Yes	Yes
ctrl + K	Select page (in split screen)	Yes	Yes
ctrl + L	Display variable list	Yes	Yes
ctrl + L	Store or link to variable	Yes	Yes
ctrl + M	Insert Math Box	Yes	Yes
ctrl + N	New document	Yes	Yes

Keys	Function	Keypad	Computer Keyboard
ctrl + O	Open document	Yes	Yes
ctrl + P	Print document	Yes	Yes
ctrl + R	Recalculate	Yes	Yes
ctrl + S	Save document	Yes	Yes
ctrl + T	Toggle Table/Comment	Yes	Not supported
ctrl + V	Paste	Yes	Yes
ctrl + W	Close current document	Yes	Yes
ctrl + X	Cut	Yes	Yes
ctrl + Y	Redo	Yes	Yes
ctrl + Z	Undo	Yes	Yes
ctrl + '	Degree (°) symbol	Not supported	Yes
ctrl + -	Ans	Yes	Not supported
ctrl + -	Make screen dimmer	Yes	Yes
ctrl + (	Square brackets []	Yes	Not supported
ctrl + )	Curly brackets {}	Yes	Not supported
ctrl + *	Template Palette/Double quotes	Yes	Not supported
ctrl + *	String	Yes	Not supported
ctrl + .	Manual data capture	Yes	Yes
ctrl +/	Fraction template	Yes	Yes
ctrl + [⑦]	Hints	Yes	Not

Keys	Function	Keypad	Computer Keyboard
			supported
ctrl + 🕮	Show symbol template	Yes	Not supported
ctrl + 🔨	Nth root	Yes	Not supported
ctrl + +	Make screen brighter	Yes	Yes
ctrl +=	Inequality pop over/menu	Yes	Yes
ctrl + 10X	Log()	Yes	Not supported
ctrl + [:=]	Assignment operator	Yes	Not supported
ctrl + click	Grab an object	Yes	Not supported
ctrl + del	Clear entry	Yes	Not supported
ctrl + docv	Insert page in new open document	Yes	Not supported
ctrl + ex	In()	Yes	Not supported
ctrl + [enter]	Approximate / Force decimal result	Yes	Yes
ctrl + esc	Undo	Yes	Not supported
ctrl + menu	Context menu	Yes	Not supported
ctrl + ক্রেজ	Off	Yes	Not supported
ctrl + 👜	Save/Save As	Yes	Not supported
Ctrl + @shift	Caps lock	Yes	Not supported

Keys	Function	Keypad	Computer Keyboard
ctrl + 🗔	Underscore	Yes	Not supported
ctrl + [sto+]/var	Store a variable / Arrow symbol / Equals	Yes	Not supported
ctrl + tab	Toggle between split screen windows	Yes	Not supported
ctrl + tab	Toggle between open documents	Not supported	Yes
ctrl + 👊	Hints	Yes	Not supported
ctrl + up arrow	Navigate the document hierarchy	Yes	Yes
ctrl + var	Store a variable	Yes	Not supported
ctrl + x²	Square root	Yes	Not supported
低 on	Toggle between Home and Current open document	Yes	Not supported
shift + 🗗	Add a column to a matrix	Yes	Not supported
shift + -	Derivative	Yes	Not supported
shift + /	\ Symbol	Yes	Not supported
shift + +	Integral	Yes	Not supported
shift + arrows	Highlight selected text	Yes	Yes
shift + enter	Add a column to a matrix	Yes	Not supported
shift + [esc]	Redo	Yes	Not

Keys	Function	Keypad	Computer Keyboard
			supported
shift + tab	Move back through fields or zones	Yes	Yes
shift + tab	Dedent	Yes	Yes
tab	Indent	Yes	Yes
tab	Move through fields or zones	Yes	Yes
tab	Display graph entry line	Yes	Yes
Ţ.	Add a row to a matrix	Yes	Not supported

# **General Information**

# Online Help

education.ti.com/eguide

Select your country for more product information.

# **Contact TI Support**

education.ti.com/ti-cares

Select your country for technical and other support resources.

# **Service and Warranty Information**

education.ti.com/warranty

Select your country for information about the length and terms of the warranty or about product service.

Limited Warranty. This warranty does not affect your statutory rights.

Texas Instruments Incorporated

12500 TI Blvd.

Dallas, TX 75243