



TI-*nspire*<sup>™</sup>

# Getting Started with the TI-Nspire<sup>™</sup>™ Handheld

This guidebook applies to TI-Nspire<sup>™</sup> software version 2.0. To obtain the latest version of the documentation, go to [education.ti.com/guides](http://education.ti.com/guides).

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# Getting started with the TI-Nspire™ handheld

## TI-Nspire™ handheld keys

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

**Scratchpad** Opens the Scratchpad for performing quick calculations and graphing.

**tab** Moves to the next entry field.

**ctrl** Provides access to the function or character shown above each key. Also enables shortcuts in combination with other keys.

**⇧ shift** Makes the next character typed upper-case.

**TI-Nspire™ Touchpad**  
Use the center area as you would a laptop touchpad. Use the outer edges as right, left, up, and down arrows.

**⏻ on** Turns on the handheld. If the handheld is on, this key displays the home menu.

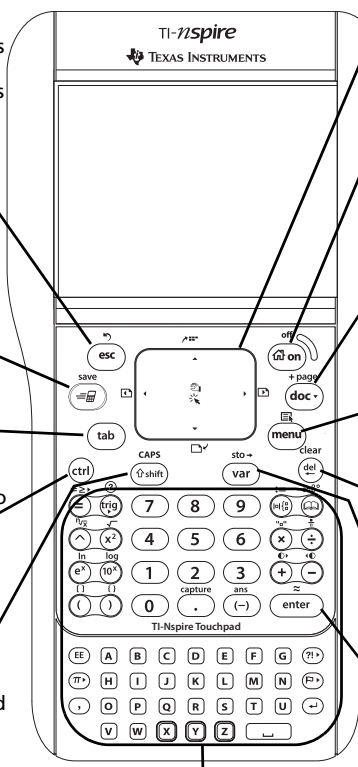
**doc ▾** Opens the Tools menu.

**menu** Displays the application or context menu.

**del** Deletes the previous character.

**var** Displays stored variables.

**enter** Evaluates an expression, executes an instruction, or selects a menu item.



Use these multi-purpose keys either alone or in combination with other keys, such as Ctrl.





## Keyboard shortcuts

Use the following keyboard shortcuts to perform common functions.

---

### Getting Help



---

Opening Hints   or  

---

### Editing Text

---

Cut  



---

Copy  

---

Paste  



---

Undo  



---



---

Redo  


---

---

Toggle approximate and exact results  



---

Change key to include appropriate accent 



---

### Inserting Characters, Symbols


---

Display character/symbol palette  



---

Underscore  



---

Display math template palette 



---

Backslash (\)  



---

Manual data capture point  

---

Clear  



---

Caps Lock  

---

Store  


---

Square brackets  

---

Curly brackets  

---

Display Trig symbol palette 

---









































Equals symbol	$\text{=}$
Display pi symbols palette ( $\pi$ , $\infty$ , $\theta$ , and so on),	$\text{\(\pi\}}$
Display equality/inequality palette ( $>$ , $<$ , $\neq$ , $\geq$ , $\leq$ )	$\text{ctrl} \text{=}$
Display marks and letter symbols palette ( $?$ $!$ $\$$ $^{\circ}$ $'$ $"$ $;$ $_$ $\backslash$ )	$\text{?!}$
Square root	$\text{ctrl} \text{x}^2$
log	$\text{ctrl} 10^x$
ln	$\text{ctrl} e^x$
ans	$\text{ctrl} (-)$

## Managing Documents

Open document	$\text{ctrl} \text{O}$
Close document	$\text{ctrl} \text{W}$
Create new document	$\text{ctrl} \text{N}$
Insert new page	$\text{ctrl} \text{I}$
Select application	$\text{ctrl} \text{K}$
Save current document	$\text{ctrl} \text{S}$

## Navigation

Top of page	$\text{ctrl} 7$
End of page	$\text{ctrl} 1$
Page Up	$\text{ctrl} 9$
Page Down	$\text{ctrl} 3$
Up a level in the hierarchy	$\text{ctrl} \blacktriangle$
Down a level in the hierarchy	$\text{ctrl} \blacktriangledown$
Document menu	$\text{doc} \blacktriangledown$

Context menu for selection	
Switch between applications on a split page	 
<b>Navigating in Documents</b>	
Displays previous page	 
Displays next page	 
Displays Page Sorter	 
Exits Page Sorter	 
Extends selection in direction of arrow	 Any arrow
Moves focus backward within page	 
<b>Wizards and Templates</b>	
Add a column to a matrix after the current column	 
Add a row to a matrix after the current row	
Integration template	 
Derivative template	 
Math template palette	 or  
Fraction template	 
<b>Modifying Display</b>	
Increase contrast	 
Decrease contrast	 
Power off	 
<b>Using Application-Specific Shortcuts</b>	
Select all in Notes or Program Editor	 
Check syntax and store (in Program Editor)	 
Insert Data Collection console	 
Find (in Program Editor)	 

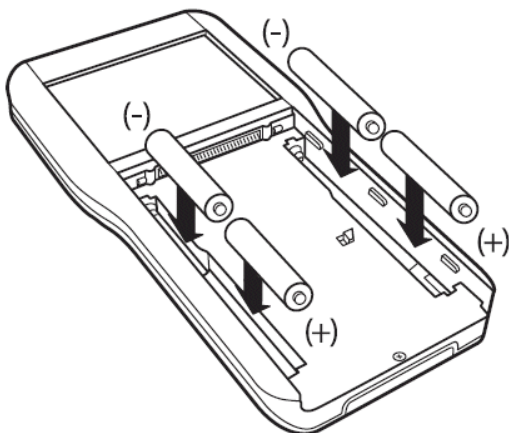


Hide/Show Entry Line (in Graph or Geometry) Go To (in Lists & Spreadsheet, Program Editor)	ctrl <b>G</b>
Find and Replace (In Program Editor)	ctrl <b>H</b>
Insert math expression box (in Notes)	ctrl <b>M</b>
Open the Scratchpad	
Recalculate (in Lists & Spreadsheet)	ctrl <b>R</b>
Add Function Table (in Lists & Spreadsheet, Graph, and Geometry)	ctrl <b>T</b>
Group/ungroup	ctrl <b>4</b> / ctrl <b>6</b>

## Starting up your handheld

### Installing batteries

1. Remove the keypad from the front of the handheld.
2. Insert the four alkaline AAA batteries provided with your handheld into the battery compartment. Arrange the batteries according to the polarity (+ and -) diagram in the battery compartment.



## AAA Battery Precautions

Take these precautions when replacing batteries.

- Do not leave batteries within the reach of children.
- Do not mix new and used batteries. Do not mix brands, or types within brands, of batteries.
- Do not under any circumstances use rechargeable AAA batteries.
- Install batteries according to polarity (+ and -) diagrams.
- Properly dispose of used batteries immediately.
- Do not incinerate or dismantle batteries.
- Seek medical advice immediately if a cell or battery has been swallowed.


## About rechargeable batteries



- Do not under any circumstances use rechargeable AAA batteries in your handheld. Use only AAA alkaline batteries.

## Disposing of used batteries safely and properly

- Do not mutilate, puncture, or dispose of batteries in fire. The batteries can burst or explode, releasing hazardous chemicals. Discard used batteries according to local regulations.

## Turning the handheld on and off

To turn on the handheld, press .

To turn off the handheld, press  . The next time you turn on the handheld, it is in the same state as when you left it. The settings and memory contents are retained.

## Using Automatic Power Down™ to prolong battery life

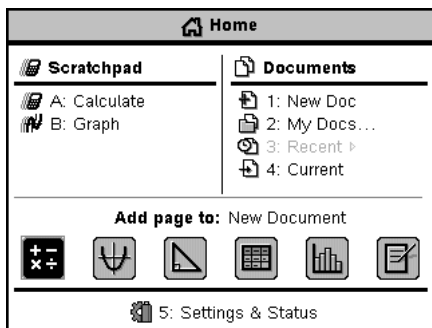
To prolong battery life, Automatic Power Down™ (APD™) turns off the handheld after several minutes of inactivity. The next time you turn on the handheld, it is exactly as you left it.





# Getting started with the TI-Nspire™ Handheld

This section guides you through the exercises in the Getting Started document that is included on your handheld. That document gives you a hands-on introduction to TI-Nspire™ applications.

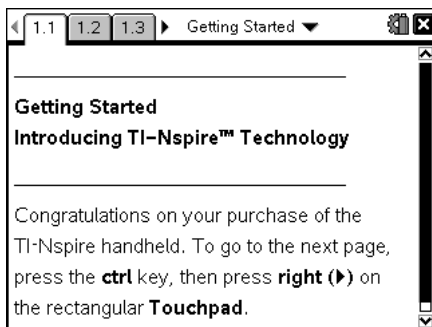
## Opening the Getting Started document

1. Make sure you have inserted the batteries, and press .



2. Press  to display the contents of the **My Documents** folder.
3. Press  on the Touchpad as necessary to select the **Examples** folder, and then click (press  on the Touchpad) to open the folder.
4. Press  as necessary to select the **Getting Started** document, and then click the document to open it.

Within a few seconds, the document opens to page 1.1. The page number represents Problem 1, Page 1.

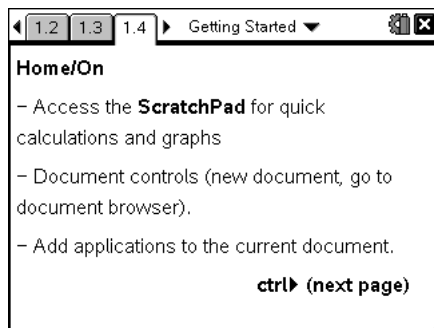


## Tips for navigating

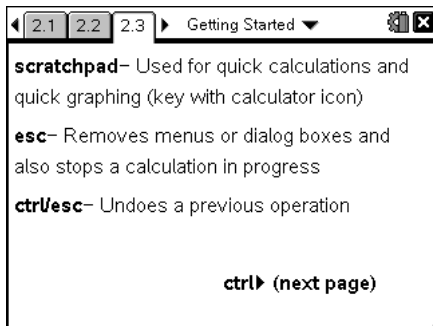
- Pressing  $\text{(ctrl)} \blacktriangleright$  or  $\text{(ctrl)} \blacktriangleleft$  moves you through the Getting Started document page-by-page. You can also use the Touchpad: Slide your finger across the Touchpad to move the pointer to the  $\blacktriangleright$  or  $\blacktriangleleft$  symbol, and then click.
- If you leave the document unintentionally, you can press  $\text{(fn on)} \text{(4)}$  to return to it.
- Each TI-Nspire™ application, such as Calculator or Graphs & Geometry, has its own menu of commands and actions. Use the  $\text{(menu)}$  key to display the current application's menu.
- As you add pages, the page numbers for all remaining pages in the current problem are incremented automatically. The page numbers shown in the accompanying screen shots are those of the original document. They might not match those on your handheld after you add pages.
- You can leave the document open when turning off the handheld, or you can close the document at any time by clicking the Close icon  $\times$  in the upper right corner. If you have made changes, you are prompted to save the changes.

## Walking through the document


- ▶ From page 1.1, press  $\text{(ctrl)} \blacktriangleright$  and read pages 1.2 through 1.4. Page 1.4 describes some of the things you can do from the Home menu.

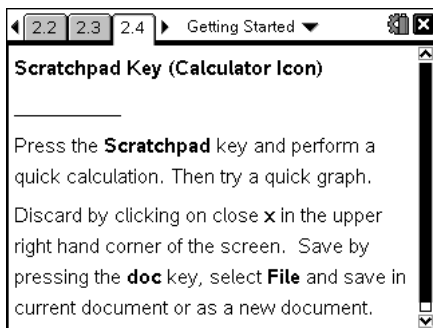



- ▶ Press  $\text{(ctrl)} \blacktriangleright$  and read the key descriptions on pages 2.1 through 2.3.






Page 2.3 mentions the **scratchpad** key, which is the  key on the handheld.

- ▶ Press  ▶ to advance to page 2.4.



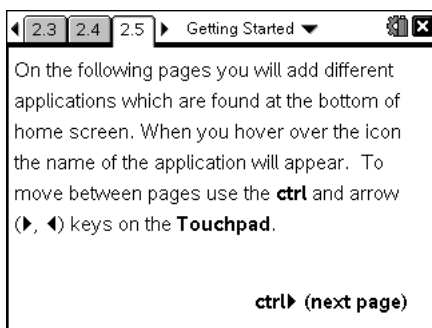
This page invites you to press  to open the Scratchpad and experiment with some quick calculations and a graph. The Scratchpad opens in front of the document.

**Tip:** While using the Scratchpad, you can press  to cycle quickly between the Scratchpad Calculate and Scratchpad Graph pages.

- On the Scratchpad Calculate page, try entering a simple math expressions such as  $3*2^5$ , or press  and choose a function from the Catalog. Press  to evaluate the expression.
- On the Scratchpad Graph page, click the entry line at the bottom and define a function such as  $f_1(x) = \sin(x)$ .

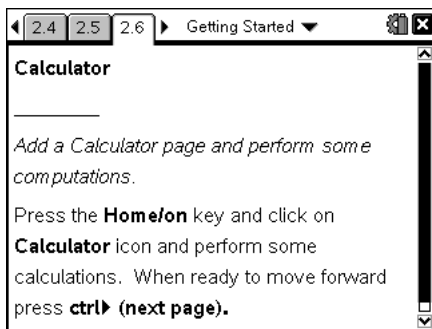
- ▶ When you are ready to leave the Scratchpad and return to the document, press **(esc)**, and then press **(ctrl) ▶** to advance to page 2.5.

**Tip:** Although the Scratchpad is separate from the document, your Scratchpad work is retained for the next time you open it.



## Adding a Calculator page

- ▶ Press **(ctrl) ▶** to advance to page 2.6, and follow the instructions to add a Calculator page.



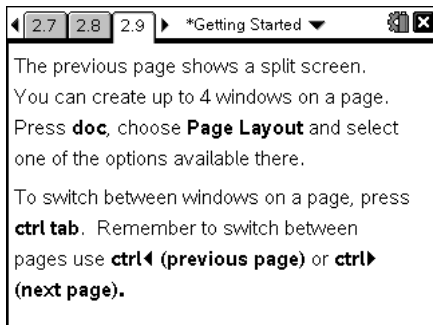
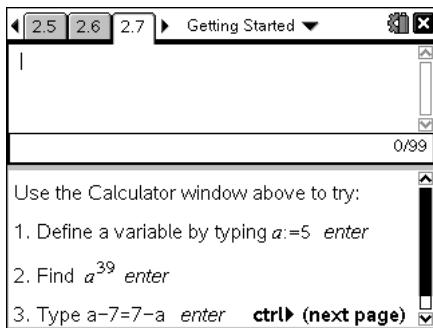
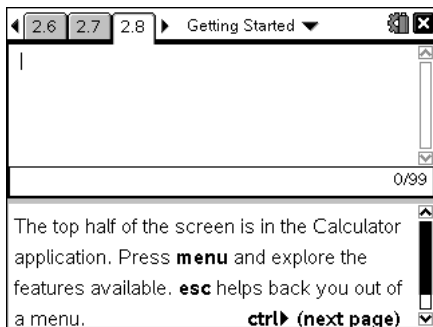
The **Calculator** icon on the Home menu looks like this:



**Tip:** Unlike the Scratchpad Calculate page, this new page becomes part of the document.

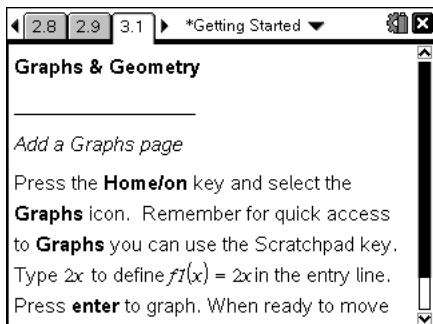
- ▶ After performing some calculations on the new Calculator page, press **ctrl** ▶ to advance to the next page. That page and the one following it have split screens, with a Calculator window at the top where you can experiment with math expressions. Split screens are explained on a third page.

**Tip:** When you press **menu** on a split screen, the menu for the active application window is displayed. If you see the wrong menu, you may need to switch to the correct window and try again.



## Adding a Graph

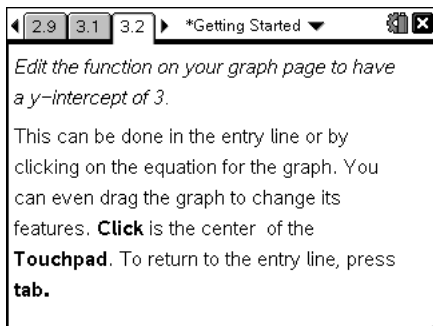
- ▶ Press **(ctrl)** ▶ to advance to page 3.1, and follow the instructions.



**Tip:** To read text that is past the top or bottom of the window, click the arrow at the top or bottom of the scroll bar.

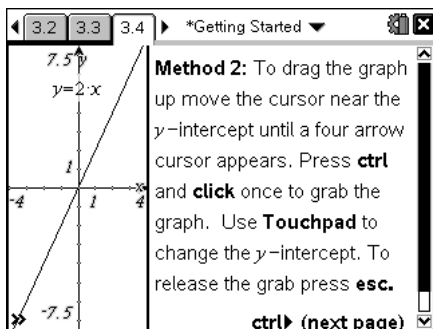
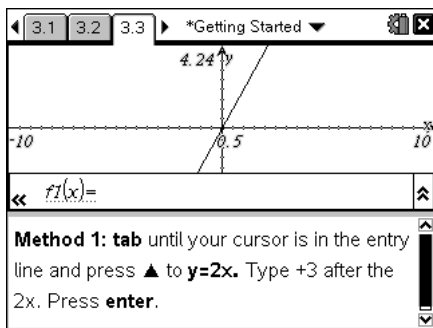
The **Graphs** icon on the Home menu looks like this: 

- ▶ After adding a Graph page and defining the function, press **(ctrl)** ▶ to advance to the next page. Follow the instructions for editing the function.



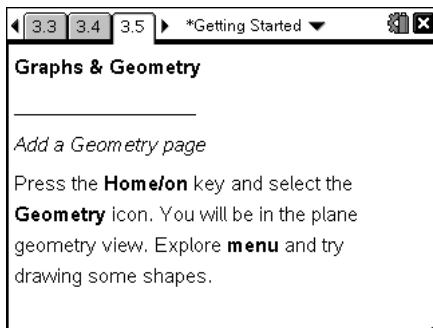
- ▶ Press **(ctrl)** ▶ to advance to two more split screens, where you can experiment with modifying a function definition interactively.





## Adding a Geometry object

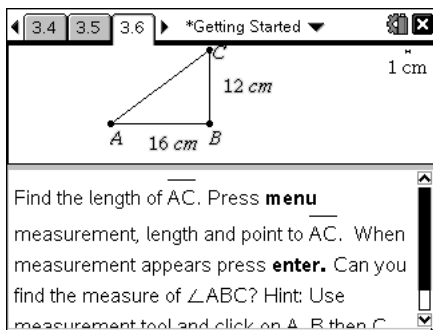
- ▶ Press **(ctrl)** to advance to the next page, and follow the instructions.



The **Geometry** icon on the Home menu looks like this:



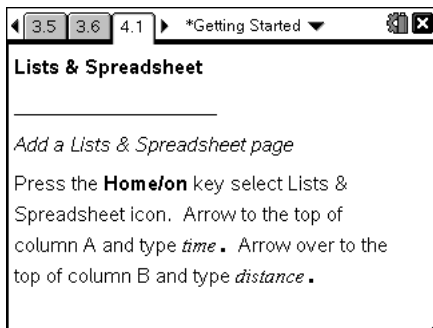
- ▶ On the new Geometry page, press **(menu)** **(9)** to choose shapes. Use the Touchpad to draw the shapes. To stop drawing and restore the selection pointer, press **(esc)**.
- ▶ Press **(ctrl)** **(▶)** to advance to the split screen on the next page. Click in the Graphs & Geometry window at the top, and follow the instructions to measure properties of the triangle.



## Adding a Lists & Spreadsheet page

- ▶ Press **(ctrl)** **(▶)** to advance to page 4.1.

The goal in Problem 4 is to create two lists containing time and distance value-pairs and then analyze the data on a Data & Statistics page within the same problem.



The **Lists & Spreadsheet** icon on the Home menu looks like this:

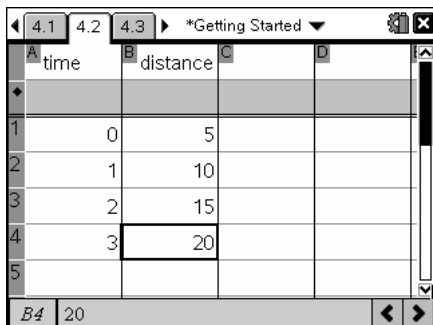


**Tip:** After typing data such as a list name or numeric value into a cell, press **▼** or **(enter)** to complete the entry and move to another cell.

- ▶ After naming the time and distance columns, press **(ctrl)** ▶ to advance to the next page, and follow the instructions for adding the data. Remember that you can press **(ctrl)** ◀ to return to your Lists & Spreadsheet page and enter the data.

**Tip:** The gray row under the column names is for column formulas and is not used in these exercises.

When you have entered the data, your Lists & Spreadsheet page should look like this:

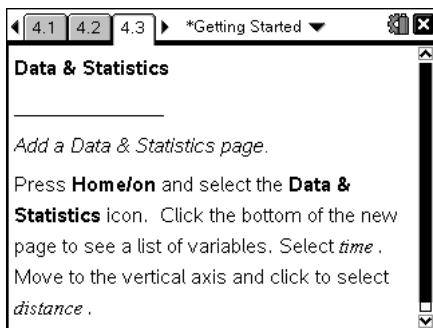



	A	B	C	D
	time	distance		
1		0	5	
2		1	10	
3		2	15	
4		3	20	
5				

Naming the lists makes them available as shared variables to all pages in Problem 4.

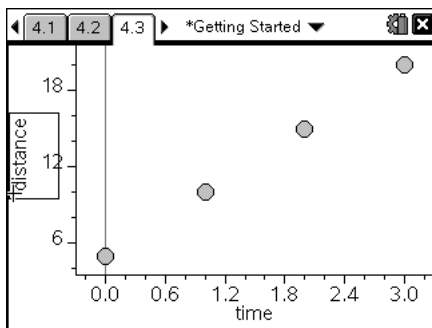
## Analyzing the lists with Data & Statistics

- ▶ Press **(ctrl)** ▶ to advance to the page titled Data & Statistics. Follow the instructions to create a Data & Statistics page and assign your lists to axes.

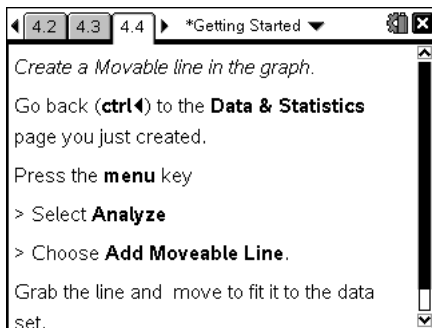



The **Data & Statistics** icon on the Home menu looks like this: 

After you have selected your time and distance data for horizontal and vertical axes, your page should look like this:

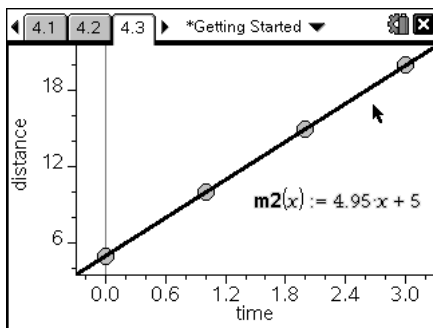


- ▶ Press **(ctrl)** ▶ to advance to the page shown below, and follow the steps to add a moveable line.

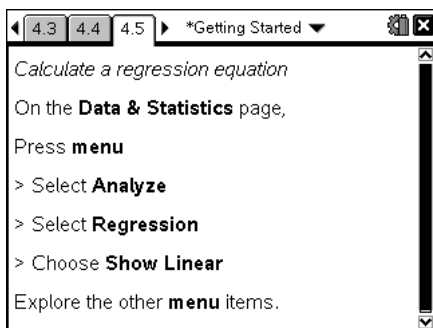


- ▶ To drag the line, move the pointer to it and press **(ctrl)** **(⌘)**. The pointer changes to a grab hand () to show that you can drag. The equation represented by the line is displayed as you move and rotate the line.
  - To move the line, drag it from its center.
  - To change the slope of the line, drag it from either end.
  - To stop dragging, press **(esc)**.

Your Data & Statistics page should look similar to this:

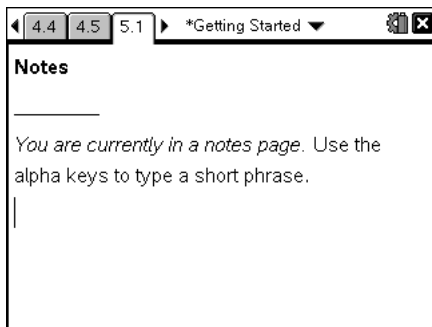


- ▶ Press **(ctrl)** ▶ twice to advance to the page shown below, and follow the instructions to perform a linear regression on the list data and display the regression equation.



## Using Notes pages

- ▶ Press **(ctrl)** ▶ as necessary to advance to page 5.1. This is a Notes page already created for you.



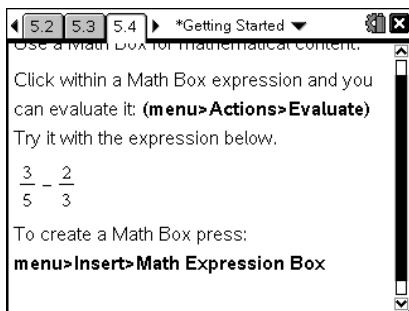
You can add your own notes pages to documents by selecting the

**Notes** icon from the Home menu. The icon looks like this:



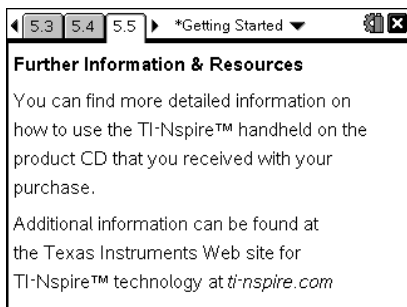
- ▶ Press **(ctrl)** ▶ and read pages 5.2 through 5.4.

Page 5.4 contains a math expression that you can edit and then evaluate by using the Notes menu. You can also use the menu to insert your own math expressions.



## Getting more information

- ▶ Press **(ctrl)** ▶ to advance to page 5.5.



- ▶ Press **(ctrl)** ▶ and read the document's remaining pages.
- ▶ When you are ready to close the document, click the Close icon **✕** in the upper right corner. If you have made changes, a message asks if you want to save the changes.
- ▶ Use the Home menu to create your own documents or to explore other documents on the handheld.





# Appendix: Service and Support

## *Texas Instruments Support and Service*

### **For general information**

For more information about TI products and services, contact TI by e-mail or visit the TI Internet address.

**E-mail inquiries:**        [ti-cares@ti.com](mailto:ti-cares@ti.com)

**Home Page:**                [education.ti.com](http://education.ti.com)

### **Service and warranty information**

For information about the length and terms of the warranty or about product service, refer to the warranty statement enclosed with this product or contact your local Texas Instruments retailer/distributor.

## **Service**

Refer Servicing to Qualified Service Personnel under the Conditions Listed Below:

- If liquid has been spilled or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally as per the operating instructions.
- If the product has been dropped or the case has been damaged.

## **Battery Precautions**

Take these precautions when replacing batteries.

- Do not leave batteries within the reach of children.
- Do not mix new and used batteries. Do not mix brands (or types within brands) of batteries.
- Do not under any circumstances use rechargeable AAA batteries in your handheld.
- Install batteries according to polarity (+ and -) diagrams.
- Properly dispose of used batteries immediately.
- Do not incinerate or dismantle batteries.

## **Disposing of Batteries**

- Do not mutilate, puncture, or dispose of batteries in fire. The batteries can burst or explode, releasing hazardous chemicals. Discard used batteries according to local regulations.

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