



TI-Nspire™ CX Navigator™ Tip Sheets

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Materials for Workshop Participant*

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T³ Professional Development Categories and Learning Objectives

There are three categories of T³ Professional Development, each with a unique set of learning objectives. This workshop is focused on technology integration, and its objectives are as follows:

Technology Integration

- Emphasis on learning to use TI technology, with broad “how-to” coverage highlighting a wide range of features
 - Subject/content-focused training on appropriate usage of TI technology in the classroom
 - I am comfortable with essential technology skills for exploring math and science content.
 - I can design opportunities for students to use technology as a tool to deepen their understanding of mathematics and science.
 - I can locate and download TI activities that align to my standards.
 - I can describe the role technology should play in the successful implementation of my standards, and I can implement a vision of a classroom where students routinely use technology to engage in the practice and content standards.
-

Workshops focused on instructional practices and content knowledge have the following objectives:

Instructional Practices

- Emphasis on classroom practices with technology as a tool to enhance student learning
- Models CCSS, TEKS, and STEM tasks using in-depth discussions, reflective practices, and essential technology skills
 - I can demonstrate the importance of teacher actions for students’ engagement in the Practices, and I can take actions that will enable students to become mathematical and scientific practitioners.
 - I can describe the role that technology should play in the successful implementation of my standards, and I can implement a vision of a classroom where students routinely use technology to engage in practice and content standards.
 - I can design tasks for students to employ the Practices, using technology as a tool to deepen their understanding of mathematics and science.
 - I can ask questions designed to make student thinking visible – to push them to think about connections, make comparisons, or probe their understanding.

Content Knowledge

- Emphasis on content with technology as support
- Addresses critical, tough-to-teach topics and new content standards for CCSS or TEKS
 - I have a deeper understanding of the mathematics and science in my content area, and I am aware of the shifts in content that affect what I teach.
 - I can design opportunities for students to use technology as a tool to deepen their understanding of mathematics and science.
 - I can locate and download TI activities that align to my standards.
 - I can describe the role technology should play in the successful implementation of my standards, and I can implement a vision of a classroom where students routinely use technology to engage in the practice and content standards.



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Student Login

TI PROFESSIONAL DEVELOPMENT

Objective

- Participants will learn how students log in to a TI-Nspire™ CX Navigator™ class.

TI-Nspire™ Technology Skills:

- Logging in as a student

TI-Nspire™ CX Navigator™ Features

- Logging in to the TI-Nspire™ CX Navigator™ System from a handheld






Tech Tips:

- Make sure the font size on your TI-Nspire™ handheld is set to Medium.

The TI-Nspire™ CX Navigator™ System uses both your computer and your students' handhelds. Your computer and your students' handhelds communicate through the TI-Nspire™ CX Navigator™ access point.

You do not have to begin a class and have students log into the TI-Nspire™ CX Navigator™ network to communicate with your students' handhelds. Without beginning a class, you can use the Transfer Tool to send or delete documents and/or operating systems on the students' handhelds. However, if you plan to use Quick Poll, Class Capture, Live Presenter, or place documents in the Portfolio during the TI-Nspire™ CX Navigator™ class session, then you must log in student handhelds to the TI-Nspire™ CX Navigator™ network.





- On the teacher computer, within the TI-Nspire™ CX Navigator™ Teacher Software, press Begin Class.
- Turn on the handheld that is connected to a wireless network adapter (or locked in the cradle). You will notice the following icons on the handheld in the upper right hand corner.

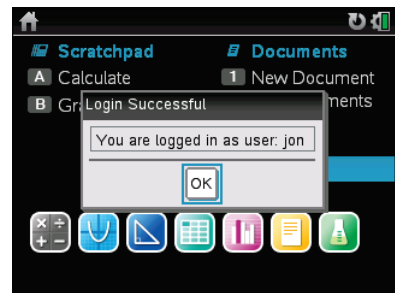
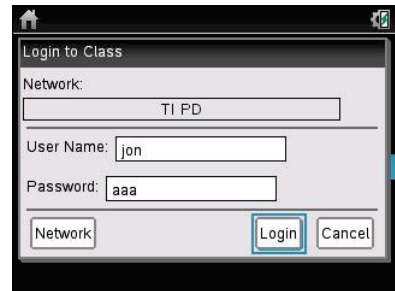
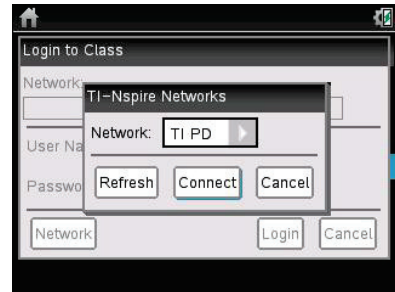
Icon	Status	Meaning
	Blinking	The handheld is searching for an access point.
	Solid with ✓	The handheld has found an access point.
	Solid with a warning sign	The handheld is not communicating with the wireless network adapter. Detach the handheld from the wireless adapter, wait for the icon to disappear, and then reattach the handheld to the adapter.
	Blinking	The handheld is connected to the network and is ready to log in.
	Solid	The handheld is logged in to the network and is fully charged.



Student Login

TI PROFESSIONAL DEVELOPMENT

3. When the  icon appears solid in the upper right-hand corner of the handheld, a “Login to Class” dialog box will appear.
 - If the dialog box does not appear, have students press  > **Settings** > **Login....**
4. When logging in for the first time, a network must be selected. Click the **Network** button, select the appropriate network from the Network drop-down field, and click **Connect**.
 - A network only needs to be selected once, not every time a handheld is logged in.
5. Students will first enter their User Name, press , and then enter their Password.
 - Passwords must be at least 3 characters. The teacher might have chosen the student password when setting up the class.
6. Press , and the “Login Successful” dialog box will appear on the handheld.



Tip Sheet: Overview of Workspaces

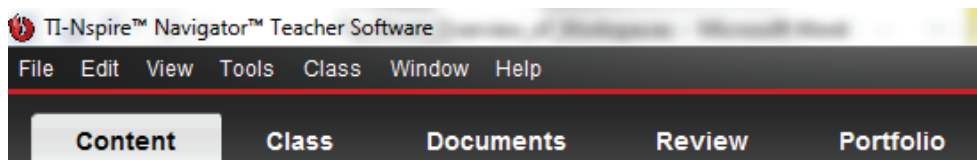
TI PROFESSIONAL DEVELOPMENT

TI-Nspire™ CX Navigator™ Objective

- Differentiate between the different workspaces in the TI-Nspire™ CX Navigator™ Teacher Software.

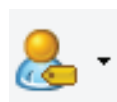
Overview of Workspaces

There are five different workspaces in the TI-Nspire™ CX Navigator™ Teacher Software: Content, Class, Documents, Review, and Portfolio. To move between the workspaces, click on the appropriate tab.

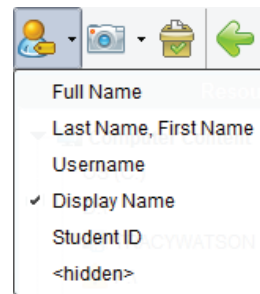


Each workspace has a specific purpose, but they work together to create a complete package for the TI-Nspire™ CX Navigator™ classroom. Depending on the selected workspace, the menus options and icons will change appropriately.

Icons Available in All Workspaces

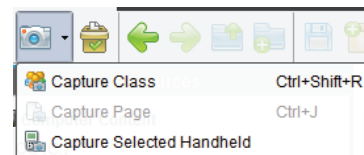


The **Student Name Format** icon allows the teacher to change the displayed format of the students in a TI-Nspire™ CX Navigator™ class. The change will be reflected in all workspaces, including the Portfolio Workspace.



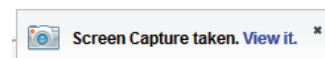
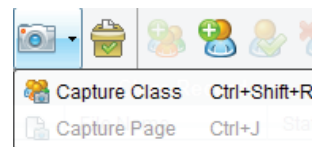
Clicking the **Take Screen Capture** icon allows the teacher to take a class capture, capture a page of a document in the Documents Workspace, or take a screen capture of a connected handheld. The availability of the options depends on the state of the software and workspace.

TI-Nspire™ Navigator System:



When **Capture Page** or **Capture Selected Handheld** is selected, a pop-up window appears in the lower right-hand corner allowing you to view the capture in the Screen Capture Window. The screen capture is also automatically placed into the computer's clipboard and can be immediately pasted into other software, such as a word processing document.

TI-Nspire™ Navigator™ NC:



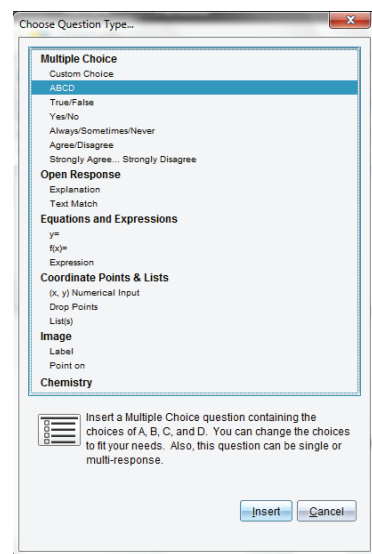


Tip Sheet: Overview of Workspaces

TI PROFESSIONAL DEVELOPMENT



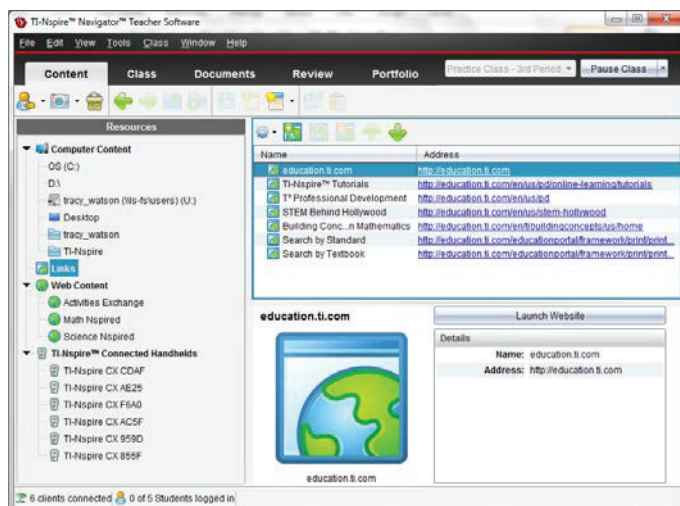
Clicking the **Quick Poll** icon allows teachers to create a new Quick Poll question at any time. The TI-Navigator Class does not have to be started, so a teacher can prepare questions before the class begins. It will be tagged with the name of the class that is displaying in the Class drop-down menu.



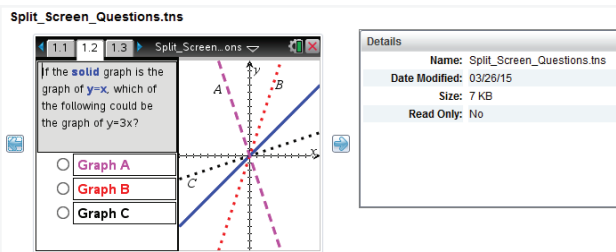
The Content Workspace

The Content Workspace is used for transferring TI-Nspire™ documents to/from the connected handhelds and the computer, for previewing documents, and for accessing documents on TI websites.

Note: When using the TI-Nspire™ Navigator™ NC Teacher Software, the list of Connected Handhelds is not available in the Resources panel.



The Content Workspace allows the teacher to browse online TI activities without launching a web browser, to see an overview of the activity, to open the TI-Nspire™ documents, and to save all the activity files to the computer. If a TI-Nspire™ document resides on the computer, it can be previewed without opening the document.

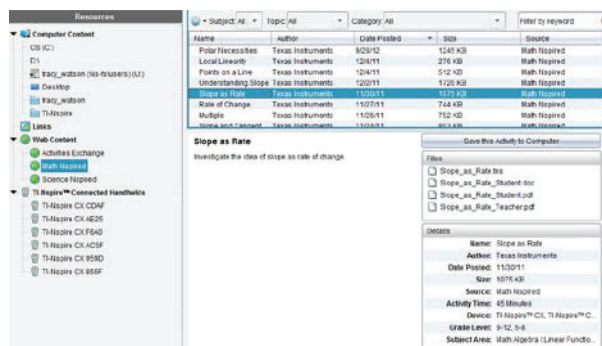


Tip Sheet: Overview of Workspaces

TI PROFESSIONAL DEVELOPMENT

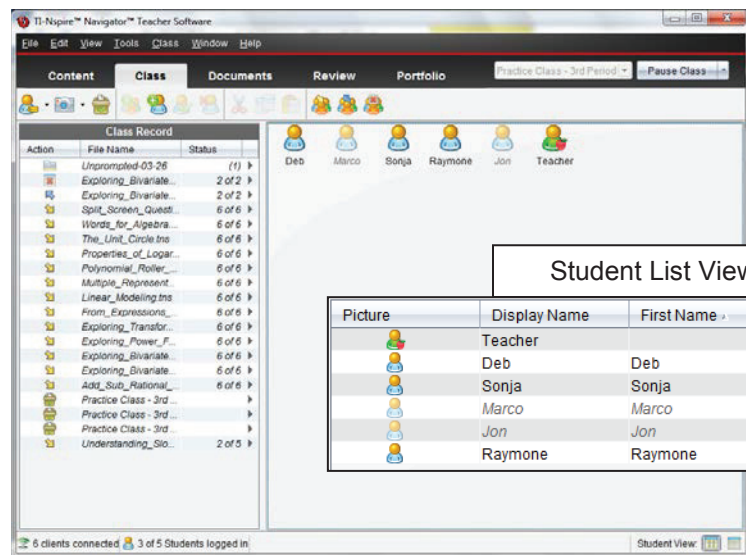
With this functionality, the TI-Nspire™ documents can be sent directly to the class or any connected handhelds without opening any other software.

Note: When using the TI-Nspire™ Navigator™ NC System, any type of document can be sent to students' computers. However, only TI-Nspire and PublishView™ documents can be opened using the TI-Nspire™ Student Software.

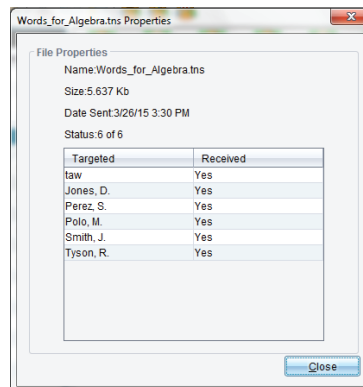
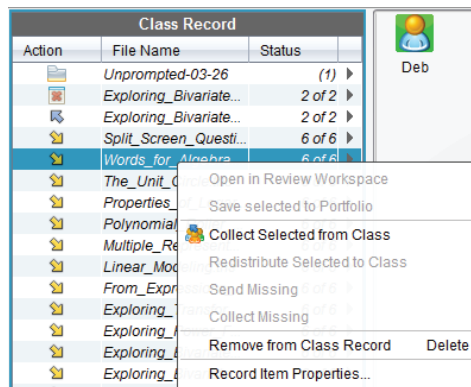


The Class Workspace

The Class Workspace allows the teacher to see which students are logged in to the classroom network and to see which documents have been transferred to/from the handhelds/computer via the TI-Nspire™ CX Navigator™ System. The teacher can also send/collect/delete documents to the class through the Class Workspace. Both the Seating Chart View and Student List View of the Class are shown below.



The Class Record is a listing of document transfers. The teacher can also access individual student information regarding a specific transfer.




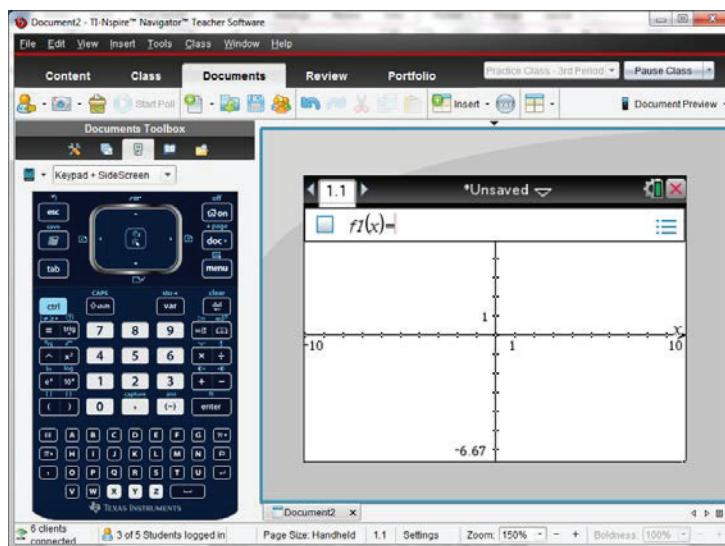


Tip Sheet: Overview of Workspaces





TI PROFESSIONAL DEVELOPMENT

The Documents Workspace

The Documents Workspace is used to create new TI-Nspire™ documents and to edit or view pre-created documents. When working in the classroom with TI-Nspire™ CX Teacher Software or TI-Nspire™ CX Navigator™ Teacher Software, most teachers click on the TI-  SmartView™ tab (Tab 3) in the Documents Toolbox (left column).

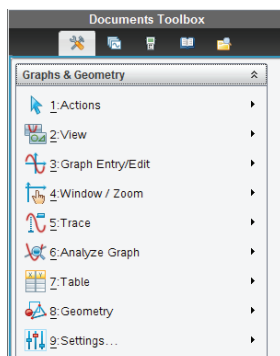


The Documents Toolbox also contains:

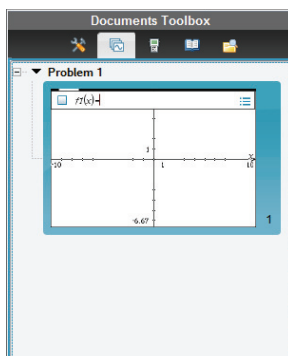
-  (Tab 1) Menu items unique for each application in a TI-Nspire document and question properties tools;
-  (Tab 2) Page sorter;
-  (Tab 4) Utilities such as math and symbol templates;
-  (Tab 5) Content Explorer file transfer tool that allows the user to transfer documents to/from the handhelds that are connected to the computer with a USB cable.

Note: When using the TI-Nspire™ Navigator™ NC Teacher Software, the Connected Handhelds list is not available in the Content Explorer.

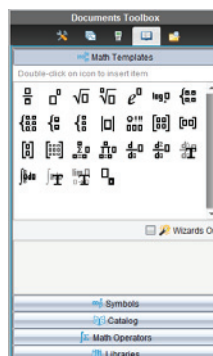
Document Tools



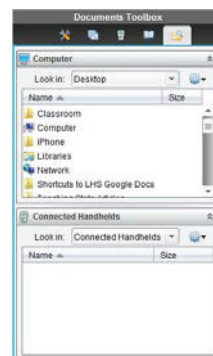
Page Sorter



Utilities



Content Explorer



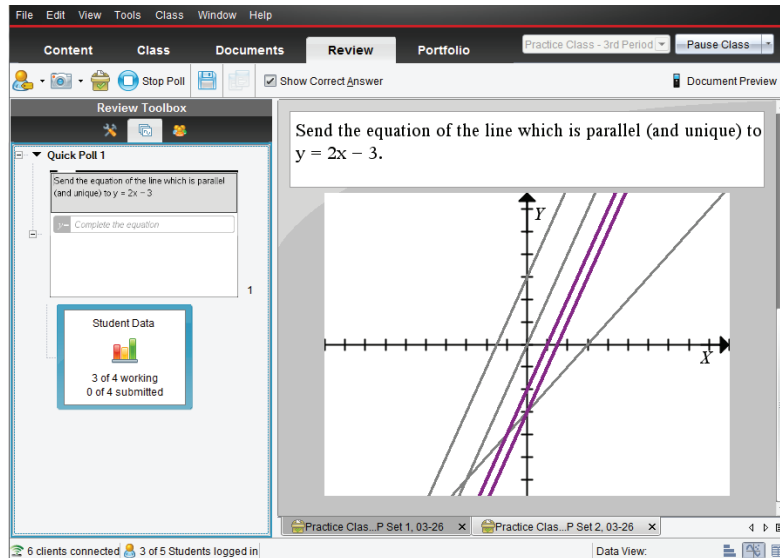


Tip Sheet: Overview of Workspaces




TI PROFESSIONAL DEVELOPMENT

The Review Workspace

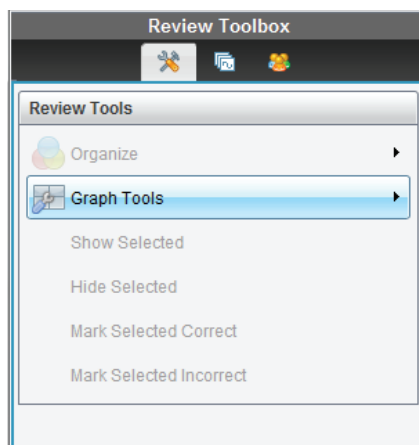
The Review Workspace is used after a Quick Poll is sent or a TI-Nspire™ document containing questions is collected using the TI-Nspire™ CX Navigator™ System. The Review Workspace allows the teacher to analyze the results of a Quick Poll question or the document question by changing the Data View between a bar chart, graph, student work, and/or lists, depending on the configuration and Question Type.



The Review Toolbox contains:

-  (Tab 1) Menu action items unique for each type of question;
-  (Tab 2) Page sorter view to browse through the Quick Polls (or document with questions);
-  (Tab 3) Individual student details for each question.

Review Tools



Students

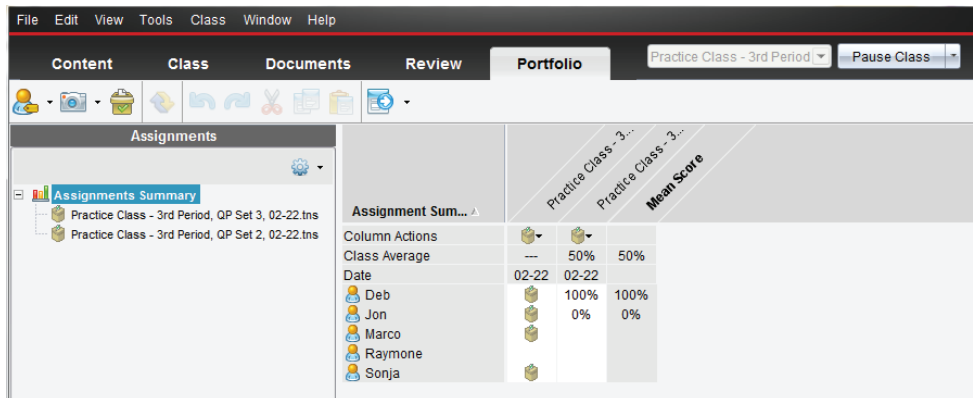
Student	Response
<input checked="" type="checkbox"/> Deb	$y = x - 3$
<input checked="" type="checkbox"/> Jon	$y = 2 \cdot x$
<input checked="" type="checkbox"/> Marco	$y = 2 \cdot x + 3$
<input checked="" type="checkbox"/> <i>Raymone</i>	
<input checked="" type="checkbox"/> <i>Sonja</i>	
<input checked="" type="checkbox"/> Teacher	$y = 2x - 3$
<input checked="" type="checkbox"/> Teacher	$y = 2 \cdot x - 2$

Tip Sheet: Overview of Workspaces

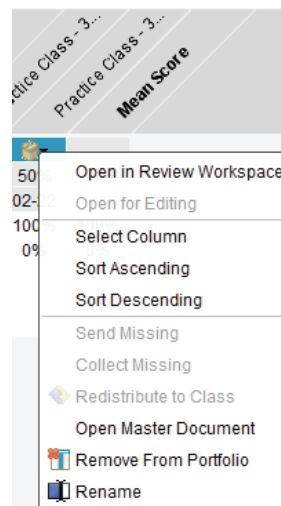
TI PROFESSIONAL DEVELOPMENT

The Portfolio Workspace

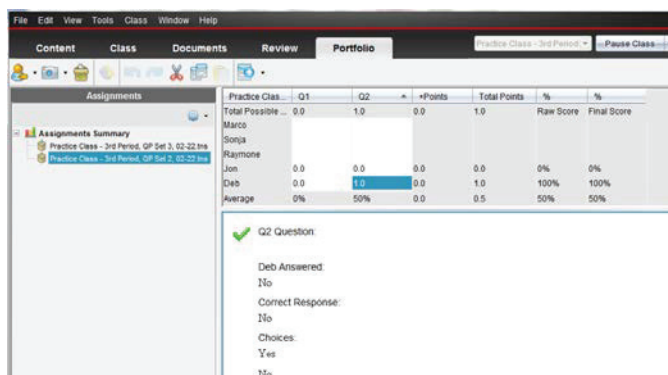
The Portfolio Workspace is used to view previously saved Quick Polls and TI-Nspire™ document results. The teacher can view the summary of scores by student, by question, and by class.



The Assignments Summary allows the teacher to manage the scores and files collected using the TI-Nspire™ CX Navigator™ System. A teacher has the option to review the class results in the Review Workspace, to send missing documents, to collect missing documents, to redistribute documents to students for further work, and/or to open the master document.



A detailed summary of the assignment results and student results is available by selecting the assignment from the list.




Tip Sheet: Adding Classes

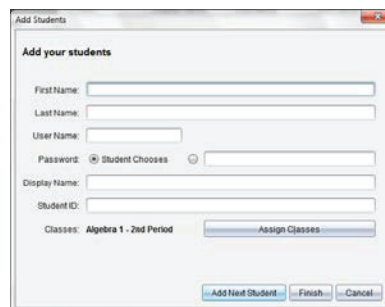
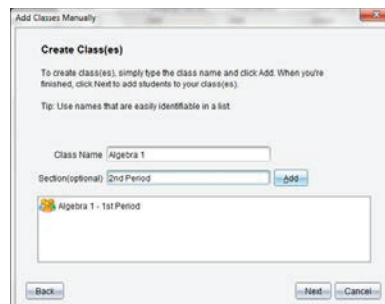
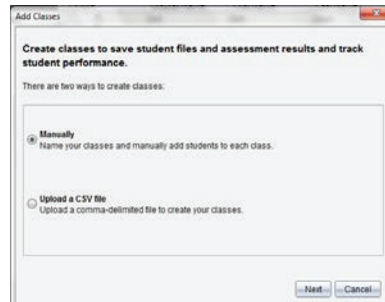
TI PROFESSIONAL DEVELOPMENT

TI-Nspire™ CX Navigator™ Objective

- Create classes in the TI-Nspire™ CX Navigator™ System.

Manually Adding Classes

1. Click the Add Classes icon . Select **Manually**, and click **Next**.
2. Fill in the field for Class Name as desired. You can have multiple sections of the same class name. For example, you can have Algebra 1 – 1st Period and Algebra 1 – 2nd Period. Click **Add** after entering each class name. Click **Next** after all the classes have been added.
3. Click **Add Student** to manually create student accounts at this time.
 - Clicking **Finish** will create an empty class with the desired name.
4. To create student accounts, you must fill in the First Name, Last Name, and User Name fields. Students can be assigned passwords, or you can allow them to choose their own upon their first login.
 - Students can be assigned a Display Name to allow for personalization or privacy, and/or Student ID's can be included as necessary. The Display Name defaults to the student's First Name if none is specified.
 - Students can be assigned to multiple classes or moved from one class to another by clicking **Assign Classes** and checking the desired class location(s).
5. Click **Add Next Student** when finished with the first student. Click **Finish** when you are done adding students to the class.






Tip Sheet: Adding Classes

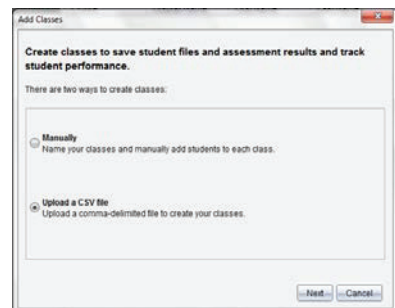
TI PROFESSIONAL DEVELOPMENT

Importing Classes and Students Automatically from CSV File

1. Store student information in a spreadsheet application such as Excel and save the file in CSV format. You must have a column for the **Class Name**, **Student First Name**, **Student Last Name**, and **Student User Name**. You can also include optional columns for *Section*, *Student ID*, and *Password*. The data may be exported from a grade book program or typed manually. The workshop instructor will have a sample CSV file.

	A	B	C	D	E
1	Class	First	Last	Login	Last Four
2	Algebra1	Anna	Allen	ANN	9523
3	Geometry	Andrew	Anderson	AND	1008
4	Algebra2	Beth	Black	BET	5157
5	Algebra1	Bob	Brady	BOB	4051
6	Geometry	Blaise	Pascal	BLA	9851
7	Algebra2	Chris	Chambers	CHR	2230
8	Algebra1	Doug	Davis	DOU	5468

2. Click the Add Classes icon . Select **Upload a CSV file**, and click **Next**.



Add Classes

Create classes to save student files and assessment results and track student performance.

There are two ways to create classes:

Manually
Name your classes and manually add students to each class.

Upload a CSV file
Upload a comma-delimited file to create your classes.

Next **Cancel**

3. Click **Browse**, navigate to the location of the saved CSV file, and click **Next**.
4. Use the drop-down menus to match up the columns in the CSV file to the TI-Navigator fields in the Add Classes by Uploading a CSV File dialog box.
5. Click **Next** when finished mapping fields.



Add Classes by Uploading a CSV File

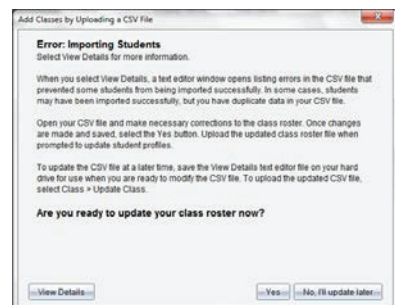
Mapping fields

Navigator fields	Imported file fields
Class Name*	Class
Section Name	Blank
First Name*	First
Last Name*	Last
User Name*	Blank
Student ID	Class
Password	Last Four

Back **Next** **Cancel**

- If any import errors occur, they will be listed in the details on the next screen. The most common error is a duplicate username.
- The CSV file can be modified and uploaded again to correct any errors or import new students added to your classes at a later date. Alternatively, add the students manually.

6. When the CSV file is successfully uploaded, you will receive a message that the classes and student profiles have been successfully created.



Add Classes by Uploading a CSV File

Error: Importing Students
Select View Details for more information.

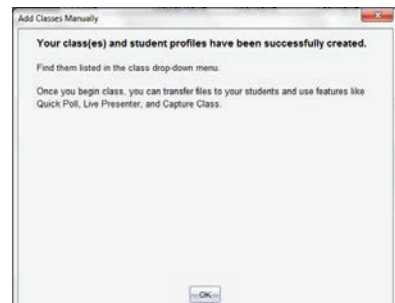
When you select View Details, a text editor window opens listing errors in the CSV file that prevented some students from being imported successfully. In some cases, students may have been imported successfully, but you have duplicate data in your CSV file.

Open your CSV file and make necessary corrections to the class roster. Once changes are made and saved, select the Yes button. Upload the updated class roster file when prompted to update student profiles.

To update the CSV file at a later time, save the View Details text editor file on your hard drive for use when you are ready to modify the CSV file. To upload the updated CSV file, select Class > Update Class.

Are you ready to update your class roster now?

View Details **Yes** **No, file update later**



Add Classes Manually

Your class(es) and student profiles have been successfully created.

Find them listed in the class drop-down menu.

Once you begin class, you can transfer files to your students and use features like Quick Poll, Live Presenter, and Capture Class.

OK

Tip Sheet: Managing Classes

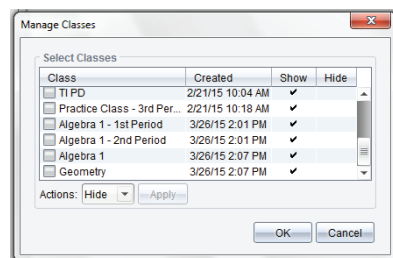
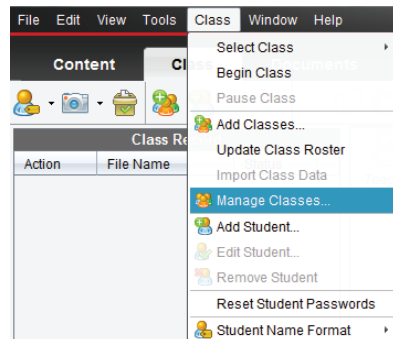
TI PROFESSIONAL DEVELOPMENT

TI-Nspire™ CX Navigator™ Objective

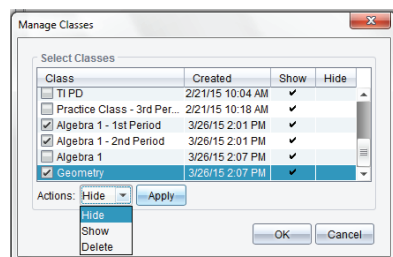
- Manage classes using the TI-Nspire™ CX Navigator™ System.

Managing Classes (Hide/show and Delete)

- Click **Class > Manage Classes** to open the Manage Classes dialog box.
 - All the classes that have been created on that computer will be displayed in the window.
- Check the box for any class that you would like to hide.
 - Select **Actions > Hide**, and click **Apply**.
 - Hidden classes can be retrieved later by returning to Manage Classes and changing their status to **Show**.

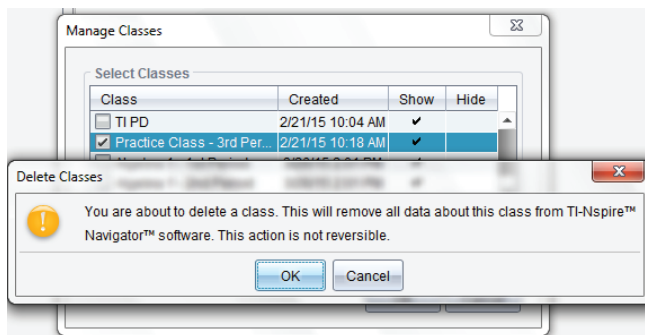


Note: Hiding a class will keep the student data attached with that class for future record keeping, but will keep that class from appearing in the list of active classes. This is helpful for schools that require teachers to maintain student records for past years.



- To delete a class, select the check box next to the class, select **Actions > Delete**, and click **Apply**.

Note: Be aware that the delete action is not reversible. **Deleted classes and student data associated with them will be permanently lost.**



- Click **OK** to exit the Manage Classes dialog box.

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Tip Sheet: Basic TI-Nspire™ CX Handheld Skills

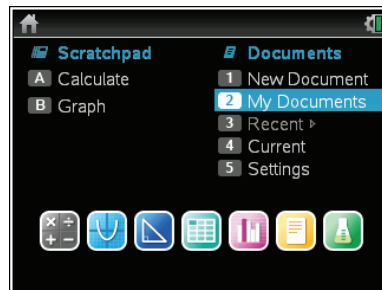
TI PROFESSIONAL DEVELOPMENT

TI-Nspire™ CX Navigator™ Objective

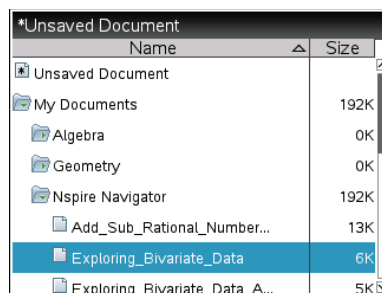
- Review the basic skills needed to use a TI-Nspire™ CX learning handheld.

Opening a Document

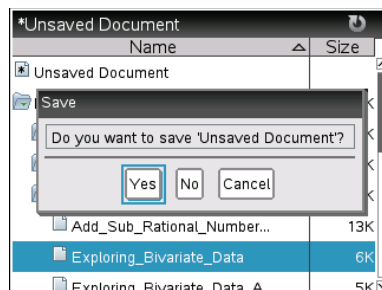
- Power on the TI-Nspire™ handheld, and press on.



- Go to **My Documents**.
- Scroll to the appropriate file using the arrow keys (\blacktriangledown / \blacktriangle).
- To open a folder, scroll to it, and press .
- Scroll to the desired document, and press or to open the document.



- If the handheld already has a document open, you will have to choose whether or not to save changes to the prior document. Select Yes or No using the arrow keys (or), and press .
- The desired document is now open.

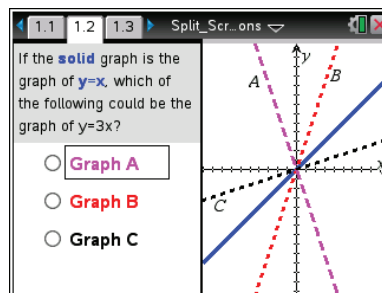


Selecting Answer Choices

- To move from the question area to the answer area of a question, press .

Note: The arrows keys can be used, but the cursor will scroll through each line of the question area until it reaches the bottom.

- Press repeatedly to move between the answer choices.
 - The arrow keys can be used here as well.

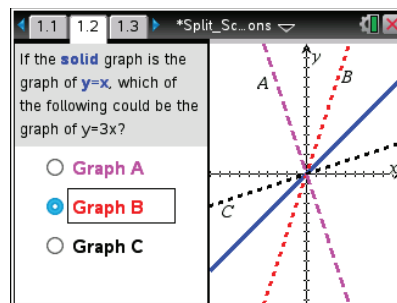




Tip Sheet: Basic TI-Nspire™ CX Handheld Skills

TI PROFESSIONAL DEVELOPMENT

3. When the desired answer choice is highlighted, press (or) to mark the answer.

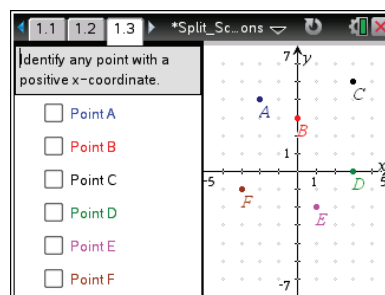


Moving between Pages

The tabs at the top of the handheld screen indicate that the document contains multiple pages.

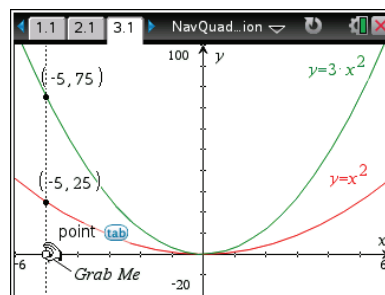
For example, in the open document shown to the right, the arrow to the right of tab 1.3 indicates that there are more than three pages in this document.

1. To move to the next page in a document, press .
2. To move to the previous page in a document, press .

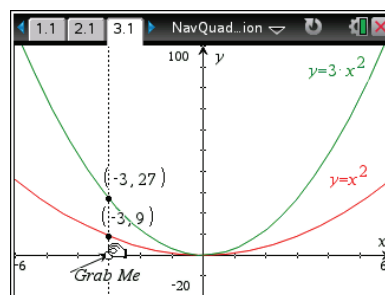


Grabbing an Object

1. Move the cursor to the graph until the cursor changes to an open hand icon ().
2. Press to close the hand ().



3. Use the arrow keys and/or the touchpad to move the object.
4. Press to “drop” the object in the desired location.




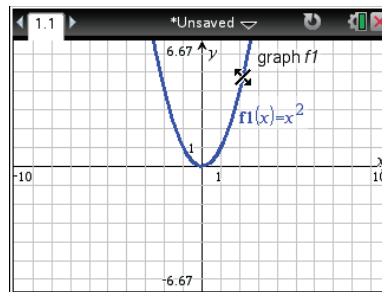




Tip Sheet: Basic TI-Nspire™ CX Handheld Skills

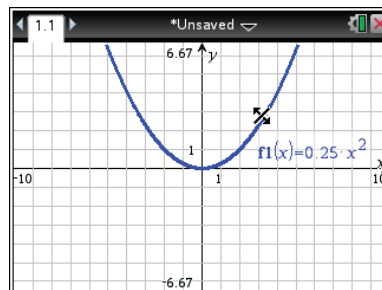
TI PROFESSIONAL DEVELOPMENT




Grabbing and Manipulating a Graph

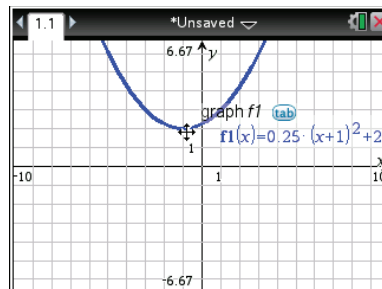
1. Move the cursor to the graph until the cursor changes to the dilation symbol .



2. Press **ctrl**  to grab the graph.
3. Use the arrow keys and/or the touchpad to manipulate the graph.
4. Press  to “drop” the graph in place.



5. To translate the graph of a quadratic function, move the cursor to the center of the graph near the vertex. When the translation symbol  appears, press **ctrl**  to grab the graph.
6. Use the arrow keys and/or the Touchpad to translate the graph.
7. Press  to “drop” the graph in place.



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Tip Sheet: Live Presenter

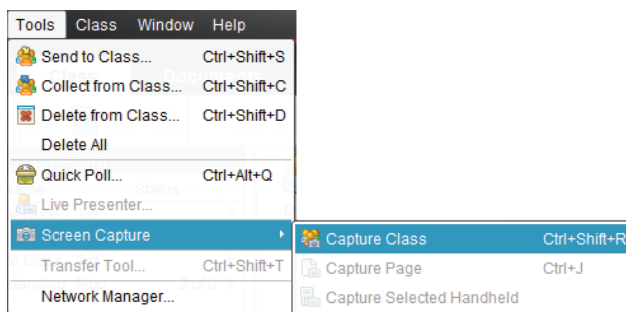
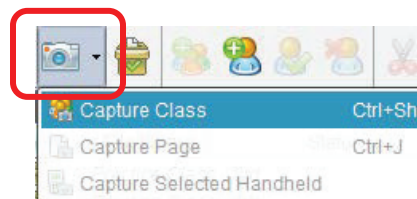
TI PROFESSIONAL DEVELOPMENT

TI-Nspire™ CX Navigator™ Objective

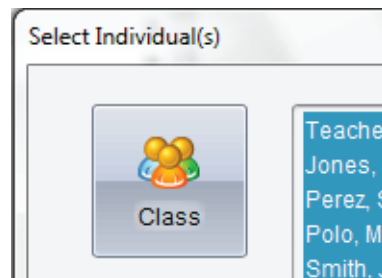
- Use the Live Presenter feature to direct instruction and check for student understanding.

Live Presenter from Class Capture

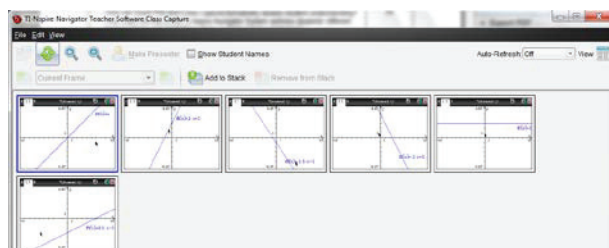
- Open the TI-Nspire™ CX Navigator™ Teacher Software, and start your LCD projector.
- Begin Class, and have the students log in to the TI-Nspire™ CX Navigator™ class.
- Select the **Capture** icon from the tool bar.
 - Alternatively select **Tools > Class Capture**, or use the computer keyboard shortcut **Ctrl+Shift+R**.



- Select the **Class** icon to take a screen capture of the entire class.



- Click **OK**.
 - You will see screen captures of the class (and they will be projected to the class).





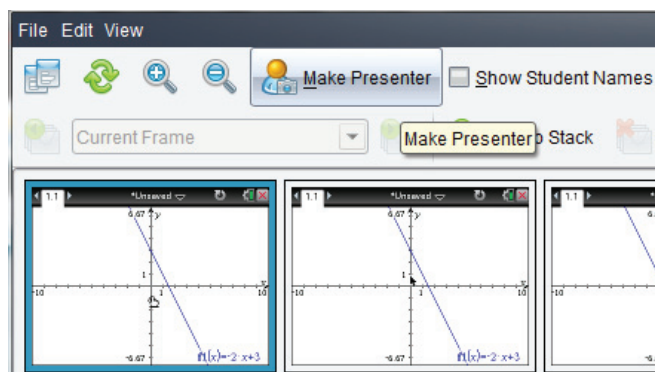
Tip Sheet: Live Presenter

TI PROFESSIONAL DEVELOPMENT

6. Select a screen capture. The screen will have a blue border around it showing that it has been selected.

7. Click **Make Presenter**.

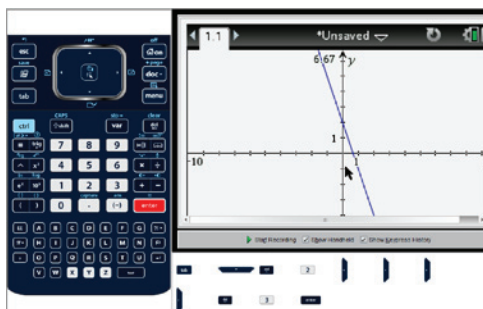
- The screen and handheld of the selected student only is projected to the class as the Live Presenter (as shown below).



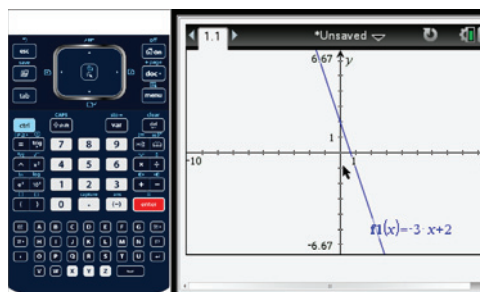
8. Everything the student does on the handheld is displayed to the class.

- Rather than the teacher pushing the buttons, he or she can give guided directions to the student and have the student go through the motions of the activity.
- Rotating the Live Presenter during a class period keeps students on task and allows the teacher to monitor student progress and understanding.

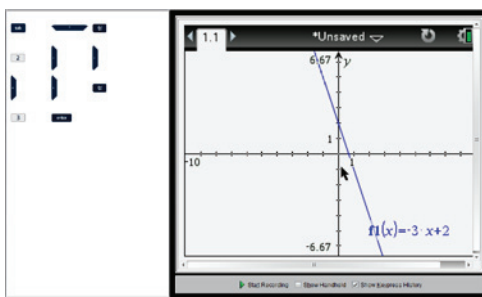
Note: The teacher can customize the layout of the presenter. Currently, the default is to show the Handheld and Key Press History. You can turn off either or both of these views to customize the Live Presenter. You will see the Key Press History and the screen changing in real time. Notice on the Teacher Software that you will see each specific button the student presses identified by a red outline.



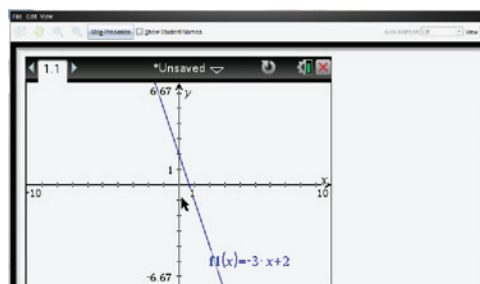
Show Handheld and Key Press History



Show Handheld Only



Show Key Press View Only



Neither Handheld Nor Key Press History

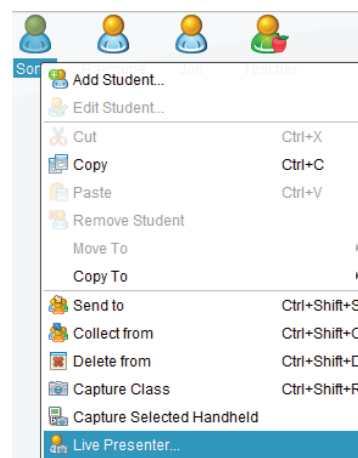
Tip Sheet: Live Presenter TI PROFESSIONAL DEVELOPMENT

- Click **Stop Presenter** when a particular student is finished as the Live Presenter.
- You will be taken back to the Class Capture Screen. At this time you can refresh screens and select a new student to become the Live Presenter.



Live Presenter from Classroom View

- Open the TI-Nspire™ CX Navigator™ Teacher Software.
- Begin Class, and have the students log in to the TI-Nspire™ CX Navigator™ class.
- Right-click on a student icon, and select **Live Presenter**.
 - The student is automatically projected to the class as the Live Presenter.



Additional Features of Live Presenter

- When the Live Presenter presses a button on the handheld, the button on the picture of the handheld is highlighted in RED to show the class which key has been pressed.
- The teacher has the following options:
 - Show Keypress History.** When selected, the class sees a list of keys the Live Presenter has pressed.
 - Show Handheld.** Show/hide the graphic of the handheld on the left side of the window.
 - Start Recording.** Select to start a video recording of what the Live Presenter is doing on the handheld. If desired, name the file, and save it on the computer. The video is saved as an .AVI file.



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Tip Sheet: Class Capture

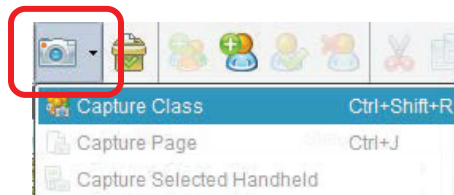
TI PROFESSIONAL DEVELOPMENT

TI-Nspire™ CX Navigator™ Objective

- Use the TI-Nspire™ CX Navigator™ Class Capture feature to check for student understanding.

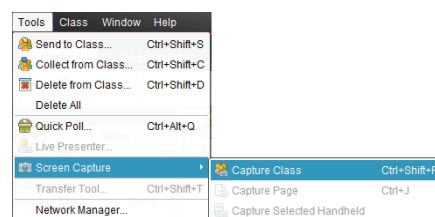
Viewing Class Screen Captures

- Open the TI-Nspire™ Navigator™ CX Teacher Software.
- Begin Class, and have students log in to the TI-Nspire™ Navigator™ class.
- Select the **Capture** icon from the tool bar, and choose **Capture Class**.

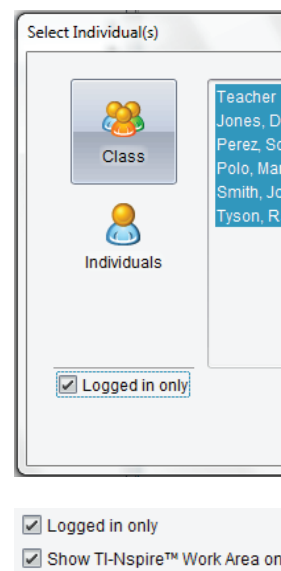


- OR select **Tools > Capture Class**.
- OR use the computer keyboard shortcut **Ctrl+Shift+R**.

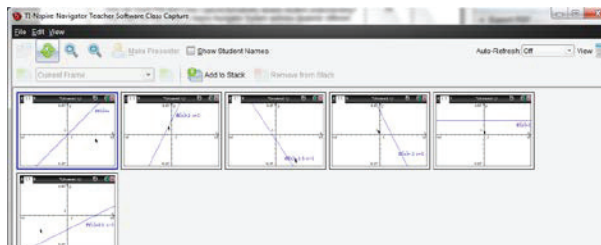
Note: When using the TI-Nspire™ Navigator™ NC System, only the Capture Class and Capture Page options are available.



- Select the **Class** icon to take a class capture of the entire class, or select the **Individuals** icon to take a screen capture of individual students.
 - When using the Individuals option, hold down the **Ctrl** key to select any number of non-consecutive students, or hold down the **Shift** key to select any number of consecutive students from the list.
 - When you select the “logged in only” option, only the students logged in to TI-Nspire™ CX Navigator™ System will be displayed.
 - The TI-Nspire™ Navigator™ NC Teacher Software has the additional option to “Show TI-Nspire™ Work Area only.” When this option is selected, only students’ work areas in the TI-Nspire™ Student Software will appear in the class capture. Otherwise, students’ entire desktops will be shown.



- Click **OK**.
 - The student screens will be tiled alphabetically according to Display Name.
 - The teacher screen will be identified by a blue border (unless the Teacher Preferences have been adjusted).

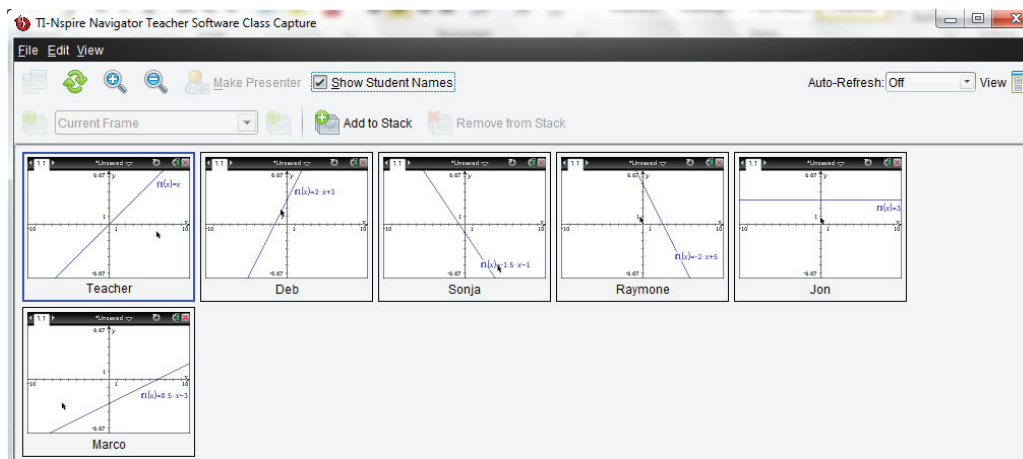




Tip Sheet: Class Capture

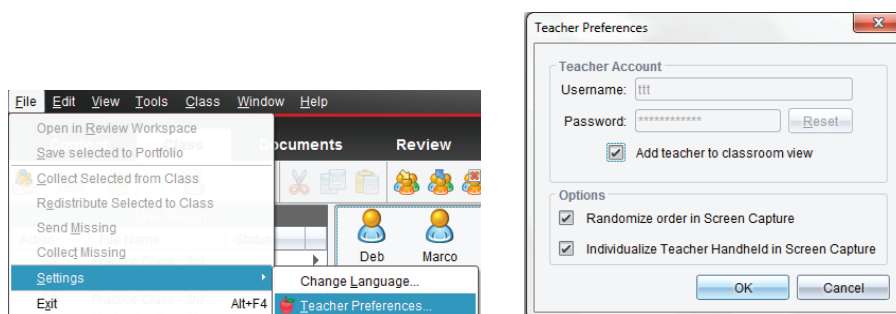
TI PROFESSIONAL DEVELOPMENT

6. To refresh the Class Capture, press the **Refresh** icon. Otherwise, the screens are in the same state as when you initialized the Class Capture.
7. The teacher has the option of choosing whether the student names are displayed with the screen captures.
 - Select **Show Student Names** as desired.
 - Use caution when showing student names in front of the class. The anonymity of the screen captures can very important to avoid potential student embarrassment.



Class Capture Teacher Preferences

In the Class Workspace, select **File > Settings > Teacher Preferences**.



- Toggle the student screen display between alphabetical by display name and random distribution with the option “Randomize order in Screen Capture.”
- Hide/show the Teacher handheld screen with the student screens using the option “Individualize Teacher Handheld in Screen Capture.”

Note: When using the TI-Nspire™ Navigator™ NC Teacher Software, Login information and Network Settings are shown instead of the Teacher Account information. The only Class Capture option available is “Randomize order in Screen Capture.”

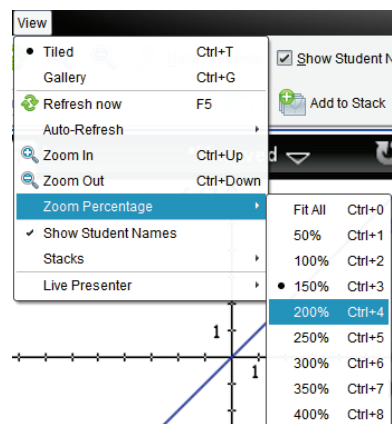
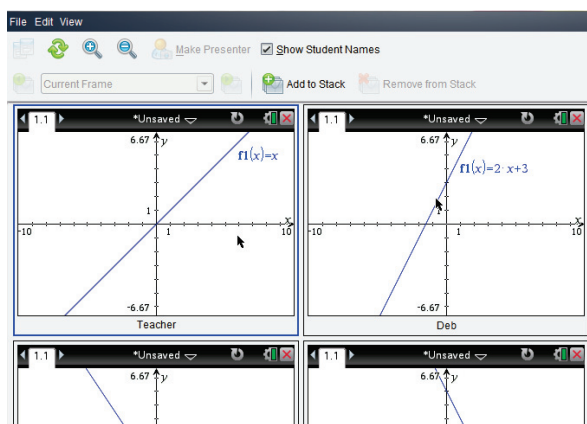
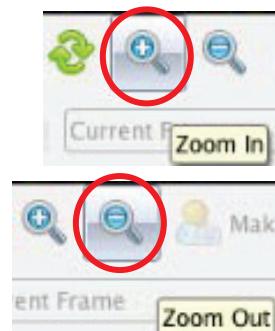
Tip Sheet: Class Capture

TI PROFESSIONAL DEVELOPMENT

Class Capture Features

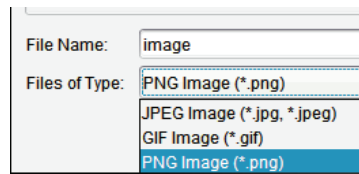
Zooming

- Pressing the **Zoom In** button enlarges the screens displayed on the teacher's computer.
- Pressing the **Zoom Out** button shrinks the screens displayed on the teacher's computer. It can be used to return the screens to the normal display size.
- From the **View** menu, you can select a fixed screen size on the teacher's computer.

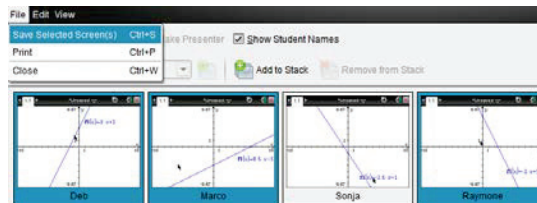


Saving Screen Captures

- Select a screen in the **Class Capture** window to save. To save multiple screens, use the **Ctrl** key.
- Select **File > Save Selected Screen(s)** to save one or more screen captures as a .JPG, .PNG, or .GIF image file (all images will be saved in the same format).



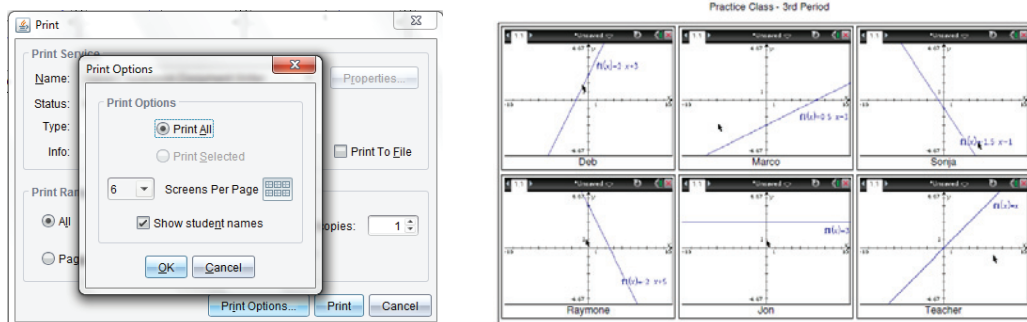
- Student screens that have been selected will be highlighted with a blue shaded border.
- Only students who are logged in will be saved. Even if the Class Capture is showing the "Not Logged In" screen, the handheld screens will not be saved.
- The screens will be saved as individual files without a student identifier (Image1, Image2, etc.). If the purpose for saving is for grading, the best option is to print the screen captures.





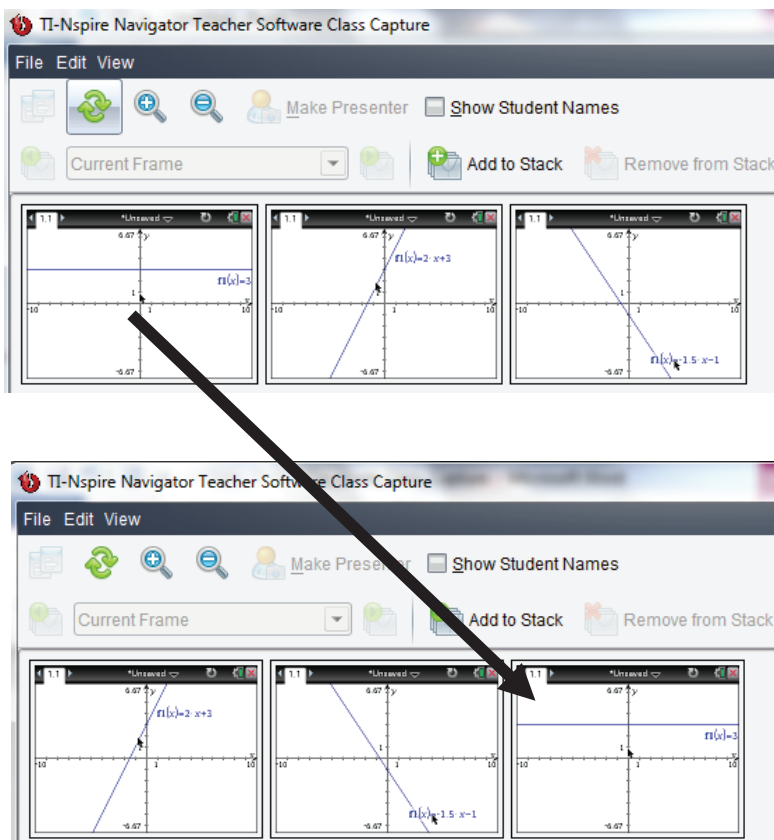
Printing Screen Captures

- Class screen captures can be printed with the screen identifiers by selecting **File > Print**. The Print Options dialog box allows you to tailor such options as the number of screens per page.



Reordering Screen Captures

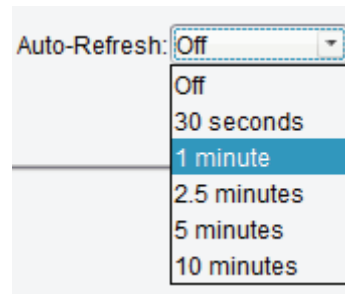
- Click to drag and drop student screens to new positions within the Class Capture window.
- Note the difference between the two groups of three screen captures below .



Tip Sheet: Class Capture TI PROFESSIONAL DEVELOPMENT

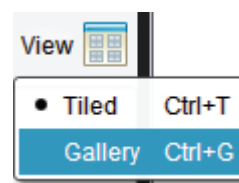
Auto-Refresh

- Once you have taken a Class Capture, click on the Auto-Refresh drop-down menu to select how often to automatically refresh student screens.
- You can use this feature to monitor student progress by setting it to refresh in several time intervals from 30 seconds to 10 minutes.

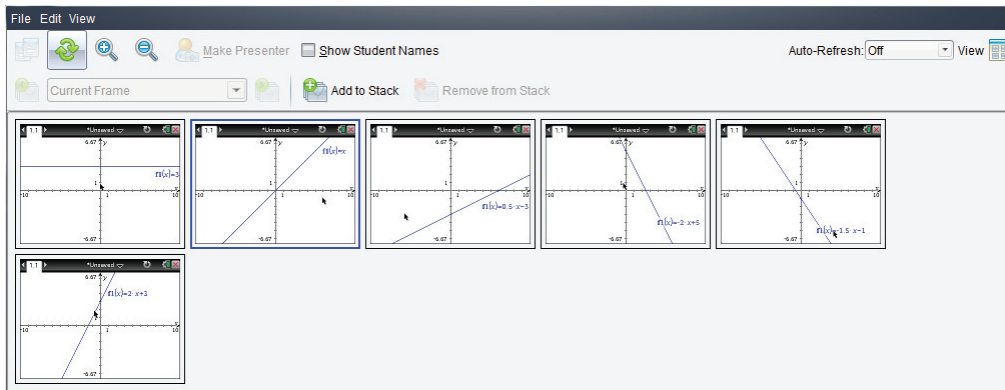


Changing the View

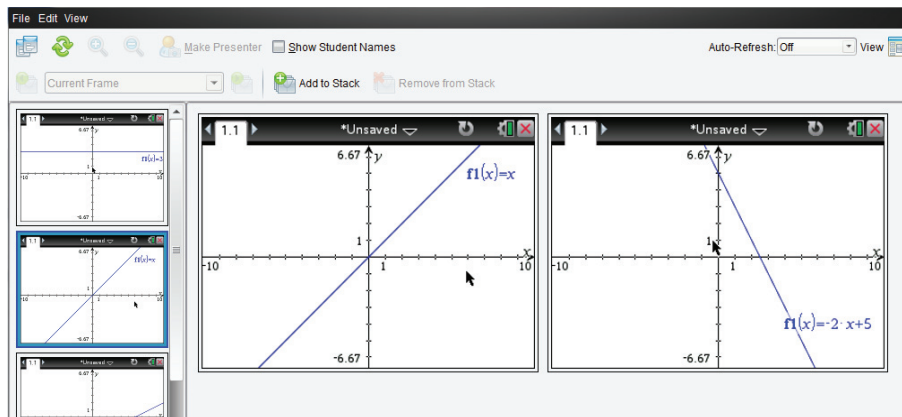
- By default, the class capture is in Tiled view.
- To change to Gallery view, click the **View** icon and select **Gallery** (or use the computer keyboard shortcut **CTRL+G**).



- Tiled View allows easy access to a full class set of screen captures.



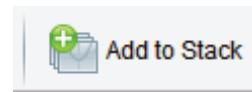
- Gallery View allows easy comparison of a few screens by selecting them in the gallery list on the left using the **Ctrl** key.



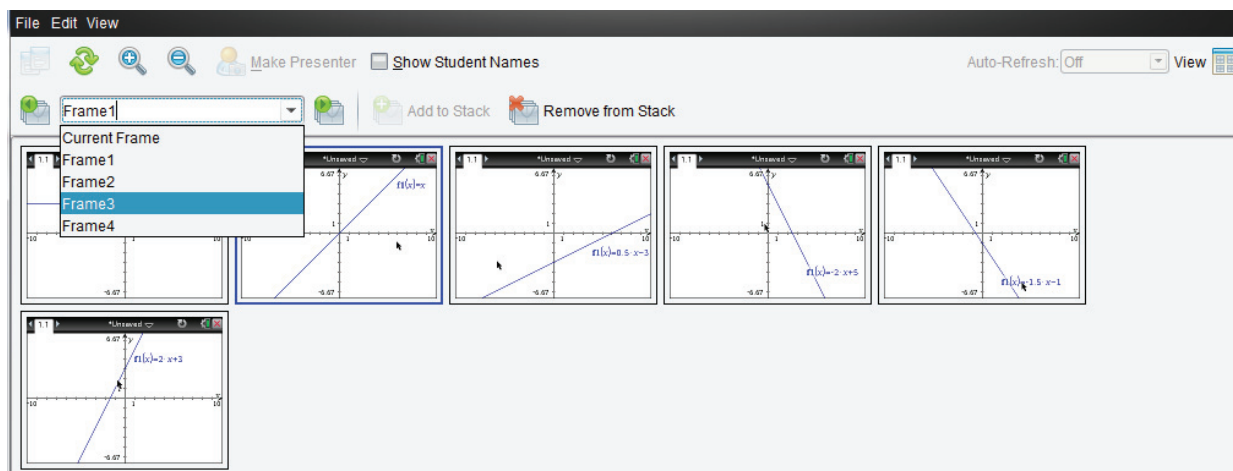


Using Screen Stacks

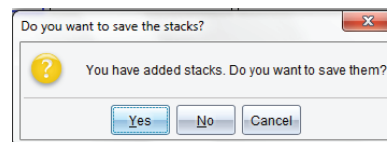
Teachers might not have time to save individual student screens during class. To help with this, a set of Class Captures can be stored as **stacks** of **frames** as if they are stored on multiple clipboards. A frame is one set of class captures. A stack holds multiple frames of class captures.



1. Click the **Add to Stack** icon to store the current set of Class Captures.
2. The teacher can **Add to Stack** multiple times throughout a class session for later review or analysis.
3. The stacks can be reviewed by clicking the Frame drop-down menu or the **Previous Frame** or **Next Frame** icons on either side of the drop-down menu.



4. Unwanted stacks can be deleted by clicking the **Remove from Stack** icon.
5. Save individual screens from any frame as image files. Select the screen(s) to save, and choose **File > Save Selected Screen(s)**.
6. When the Class Capture window is closed, you will be asked whether you want to save the stacks. Click **Yes** if you want to save the stacks of Class Captures.
 - Later, you can go through the stacks of frames for a class and save individual Class Capture images.





Tip Sheet: Quick Poll

TI PROFESSIONAL DEVELOPMENT

TI-Nspire™ CX Navigator™ Objective

- Use the various features of Quick Poll, such as sending, collecting, and reviewing a Quick Poll.

What is Quick Poll?

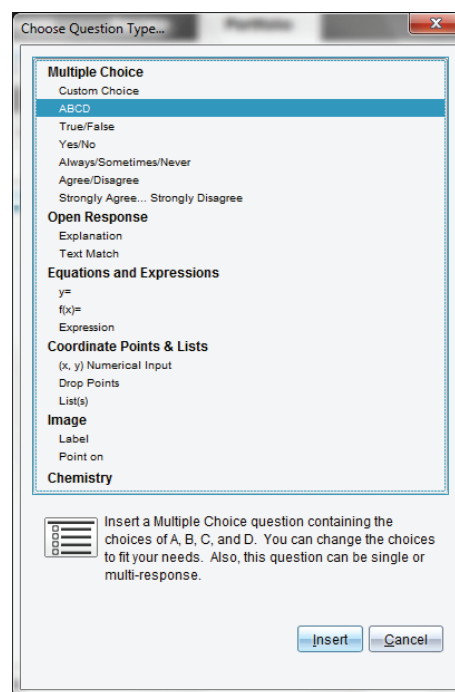
An important teaching technique is *questioning students* during class to gauge their understanding of the topics and to ensure that the class discussion is on pace with the students understanding.

The Quick Poll feature of the TI-Nspire™ CX Navigator™ System enhances the questioning technique by allowing ALL students to answer the posed questions and allowing the teacher to see ALL student responses in real time. Then the teacher can make the appropriate reactions/adjustments to the class based on the snapshot of student understanding.

Question Types

There are various types of Quick Poll questions:

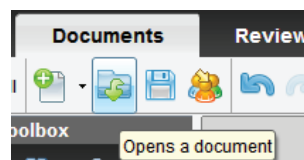
- Custom Multiple Choice
- Standard Multiple Choice (A-B, A-C, etc.)
- True/False
- Yes/No
- Always/Sometimes/Never
- Agree/Disagree (5, 3, or 2 selections)
- Open Response – Explanation
- Open Response – Text Match
- Equations ($y=$ and $f(x)=$)
- Expressions
- (x,y) Numerical Input
- Drop Points on a Coordinate System
- List(s)
- Image (Label, Point on)
- Chemistry



Sending Pre-Made Quick Poll Questions to the Class

Any question page can be sent as a Quick Poll question. The teacher can create a document ahead of class time with questions they anticipate might be helpful to ask students to gauge their understanding of a concept. Teachers can decide during class which ones are appropriate to help guide the lesson.

1. Open the document containing questions for potential Quick Poll questions in the Documents Workspace.

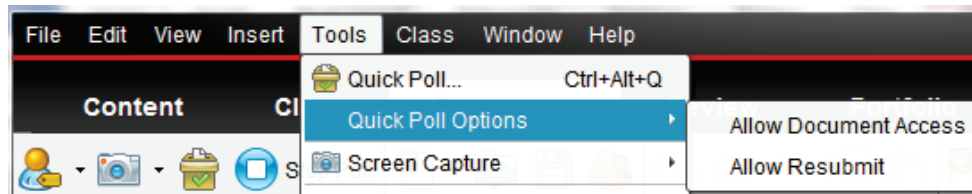




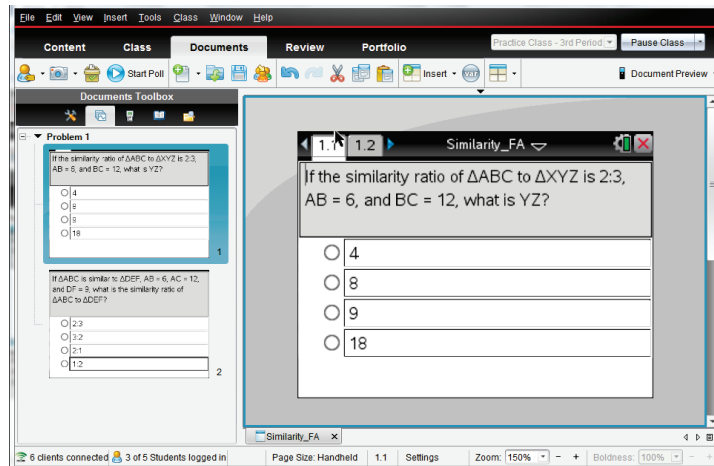
Tip Sheet: Quick Poll

TI PROFESSIONAL DEVELOPMENT

- (Optional) Modify the Quick Poll Options.
 - Allow students access to documents on their handheld. This option is not available when using the TI-Nspire™ Navigator™ NC Teacher Software.
 - Allow students to resubmit their Quick Poll answers.



- After the TI-Nspire™ CX Navigator™ class has been started and students have logged in to class, the current question being viewed in the Documents Workspace can be sent as a Quick Poll by clicking the **Start Poll** icon.

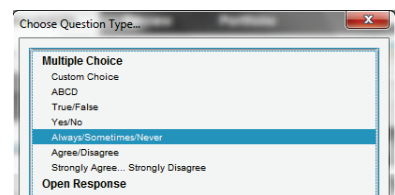


- When all students have answered the question, click the **Stop Poll** icon.



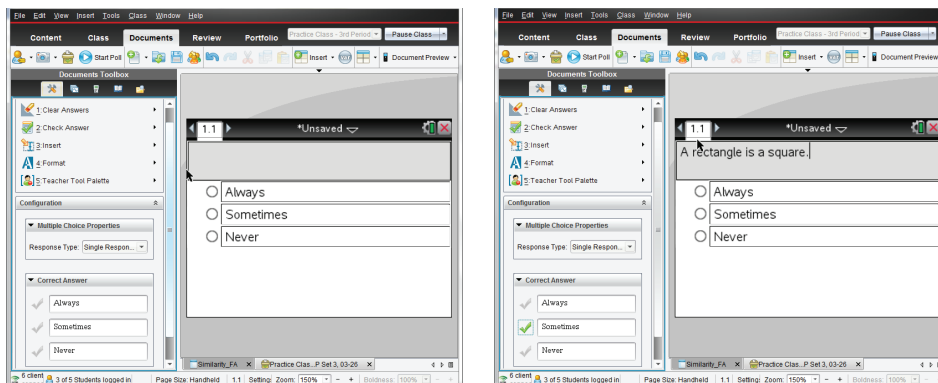
Sending “On-The-Fly” Quick Poll Questions to the Class

- After the TI-Nspire™ CX Navigator™ class has been started and students have logged in to class, click the **Quick Poll** icon.
- Select a Question Type, and press **Insert**.
 - If this is the first Quick Poll question of the TI-Navigator session, a new document will open in the Documents Workspace titled “*Class Name – QP Set # – Date*”.



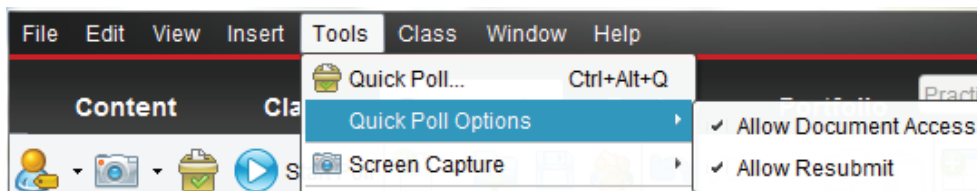
Tip Sheet: Quick Poll TI PROFESSIONAL DEVELOPMENT

3. (Optional) Enter the question into the text box, and select/enter answers when appropriate.



4. (Optional) Modify the Quick Poll Options.

- Allow students access to documents on their handheld.
- Allow students to resubmit their Quick Poll answers.



5. Send the question to the class by clicking the **Start Poll** icon.

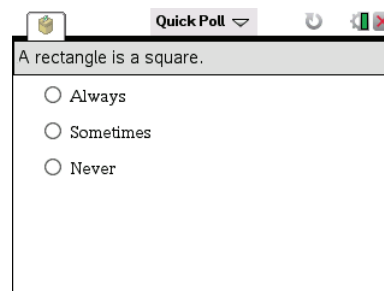


6. When all students have answered the question, click the **Stop Poll** icon.



Responding to Quick Poll Questions as a Student

- After the teacher has started the Quick Poll question, all students who are logged in to the class will automatically receive the question on their calculators as a pop-up window.
 - If a student logs into the class after the poll has been sent, they will receive the poll as long as the teacher hasn't click the **Stop Poll** icon.



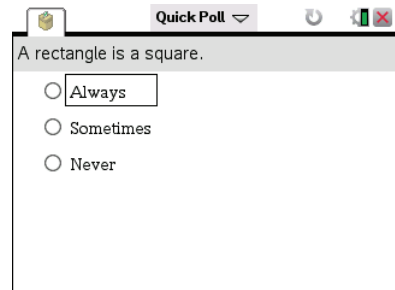
- For multiple choice questions, students move through the answer choices by pressing **tab** (or **▼**). To select an answer, they press **↵** or **enter**.
- For other types of questions, students enter the answer using the appropriate keys and templates on the handheld.



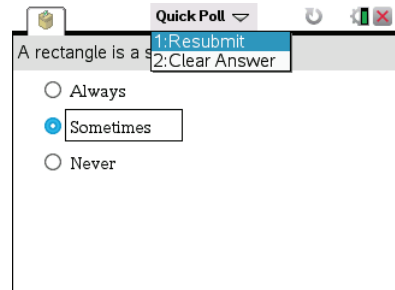
Tip Sheet: Quick Poll

TI PROFESSIONAL DEVELOPMENT

- To send the answer response to the teacher's computer, students press **doc** > **Submit**.



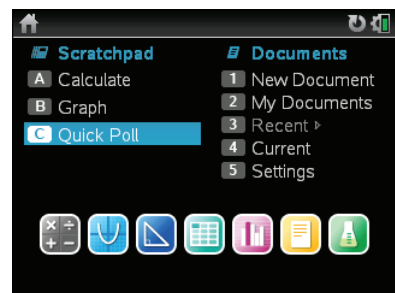
- If the Allow Resubmit option was selected by the teacher, students can change their answers and resubmit by pressing **doc** > **Resubmit**.



Note: If the resubmit option is not selected, the question will disappear from the handheld once the answer has been submitted.

- If the Allow Document Access option was selected by the teacher, students can temporarily exit the Quick Poll to look at a document by pressing **Home** or **Apps**.

- To return to the Quick Poll question, select Quick Poll from the Home screen.

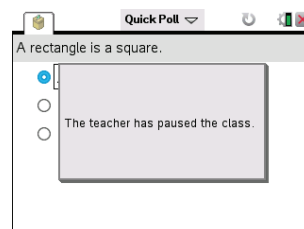


Note: When using the TI-Nspire™ Navigator™ NC Teacher Software, the “Allow Document Access” option is not available. By default, students will have access to all documents and applications on their computers during a Quick Poll.

Pausing/Resuming Class

When students are having trouble with a Quick Poll question, the teacher might find it useful to gain the students attention by preventing them from interacting with their handheld, i.e., pausing the class. The **Pause Class** option will prevent any interaction with the handhelds.

- To pause the class, click the **Pause Class** icon, which is located by the class drop-down menu.
 - When a class is paused, the students receive a message on their handhelds.
- To resume the class, click the **Resume Class** icon.
 - Students are once again able to interact with their handhelds.



Tip Sheet: Quick Poll

TI PROFESSIONAL DEVELOPMENT

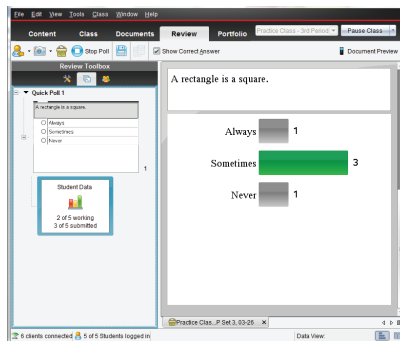
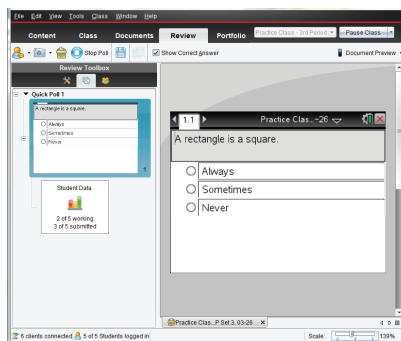
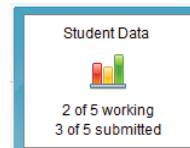
Viewing Quick Poll Results

The teacher can view the results of a Quick Poll while students are submitting their responses or after the Quick Poll has been stopped.

- As soon as the Quick Poll is sent to the class, the software automatically changes to the Review Workspace and displays the Quick Poll question that was sent to the class.

Note: The first 15 Quick Poll questions of the class session will be stored in a single Review document. After the 15th question, a new Review document will start for the next 15 Quick Poll questions.

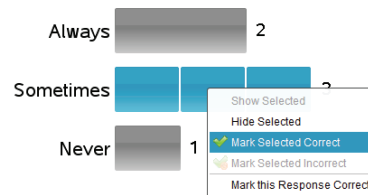
- To view the class results for the Quick Poll questions, click on the **Student Data** icon underneath the Question page in the Page Sorter view. Alternatively, scroll down using the scroll bar to the right of the large view of the Quick Poll question (see below right).



- When all students have answered the question (or you are satisfied that a sufficient amount of time has passed), click the **Stop Poll** icon.



- If you did not select the correct answer in the Question page prior to starting the poll, right-click on the correct response, and select **Mark this Response Correct**.



- The bar next to the correct answer will turn green, indicating that it is the correct answer.

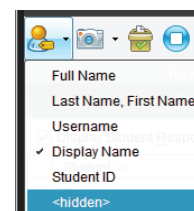
- To view the student-submitted answers in detail, click on the Students icon in the Review Toolbox.

Student	Response	Time
Deb	Always	05:50:...
Jon	Sometimes	05:50:...
Marco	Sometimes	05:50:...
Raymone	Never	05:50:...
Sonja	Sometimes	05:50:...

- The display name and response are shown in a table.

- The poll details can be sorted by display name, by response, or by time. Click the top of the desired column to sort.

- To hide the student names, click the **Student Name Format** icon and select **<hidden>**.





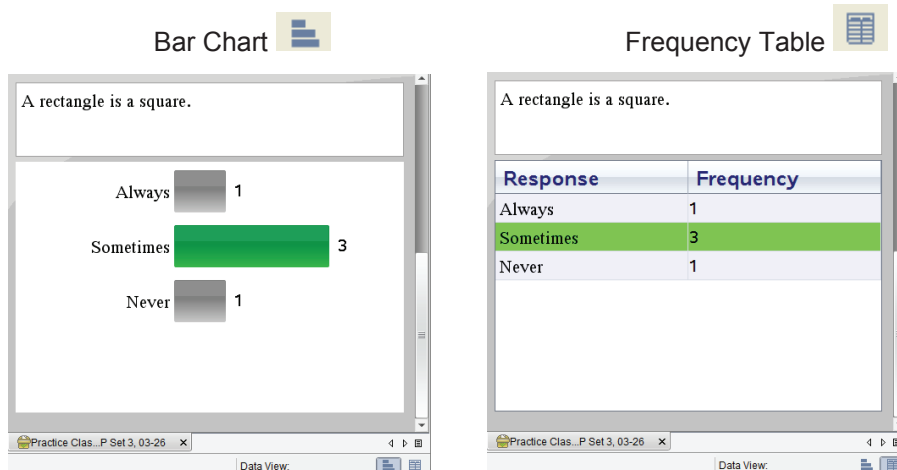
Tip Sheet: Quick Poll

TI PROFESSIONAL DEVELOPMENT

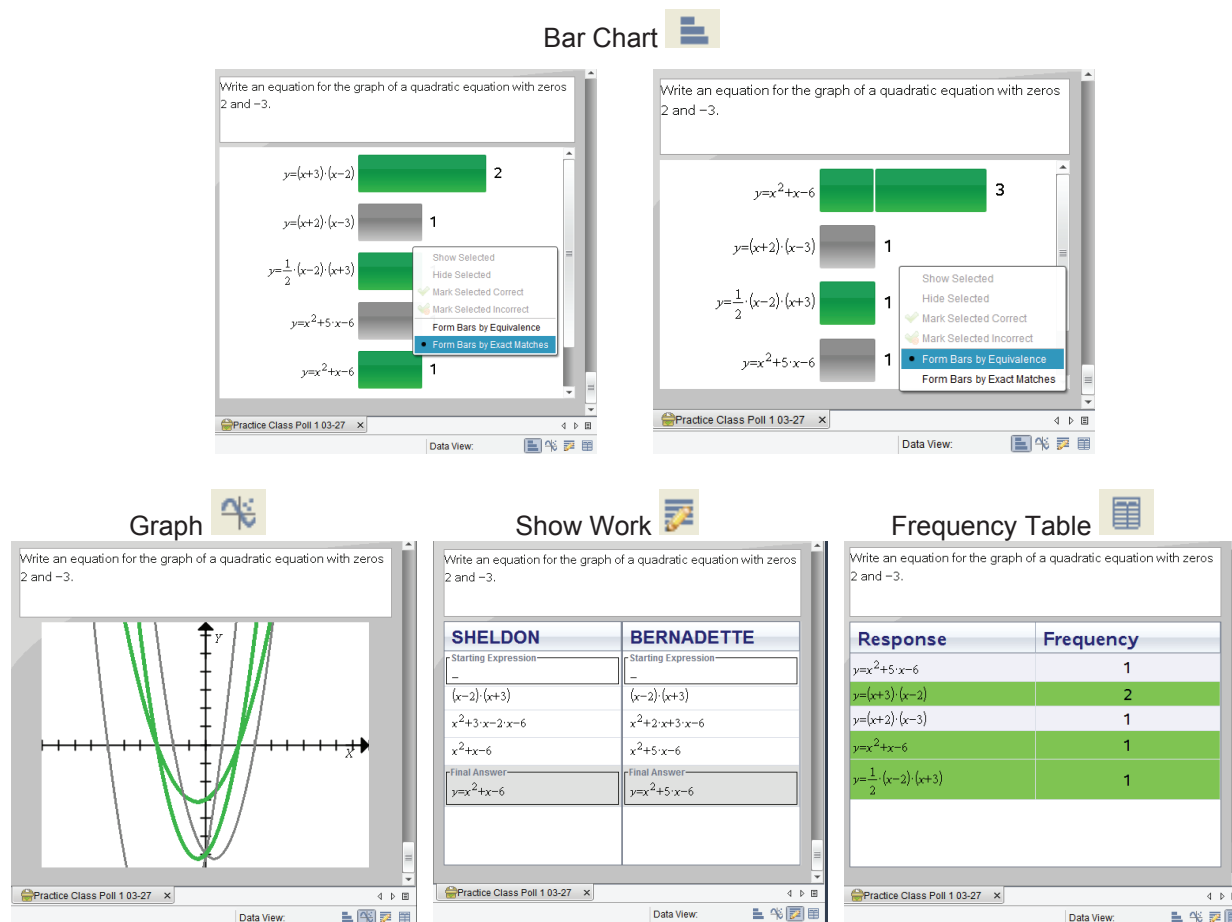
Additional Data Views for Quick Poll Results

When the Student Data icon is selected, most of the results are displayed as a bar chart by default. Depending on the type of Quick Poll question, the results can be displayed in a variety of data views.

Data Views for Multiple Choice and Open Response Questions



Data Views for Equation Questions

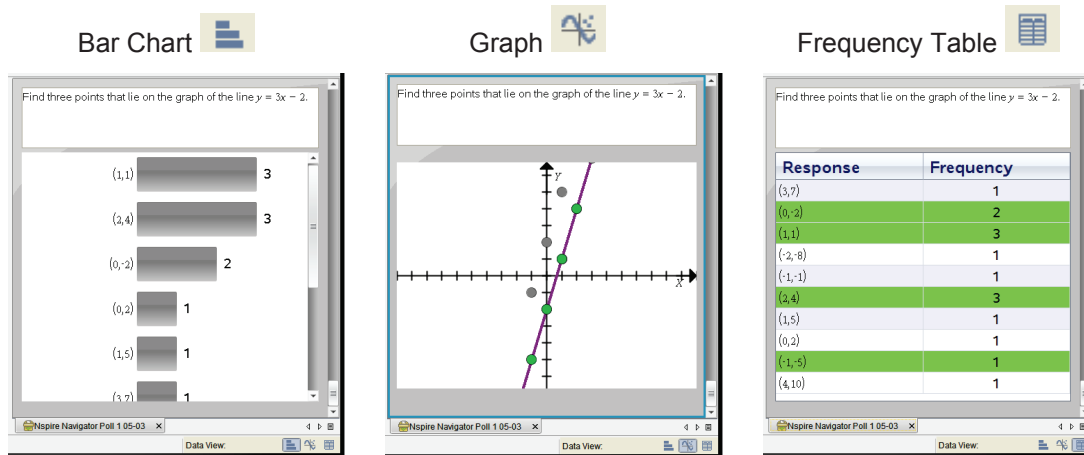


Tip Sheet: Quick Poll


TI PROFESSIONAL DEVELOPMENT

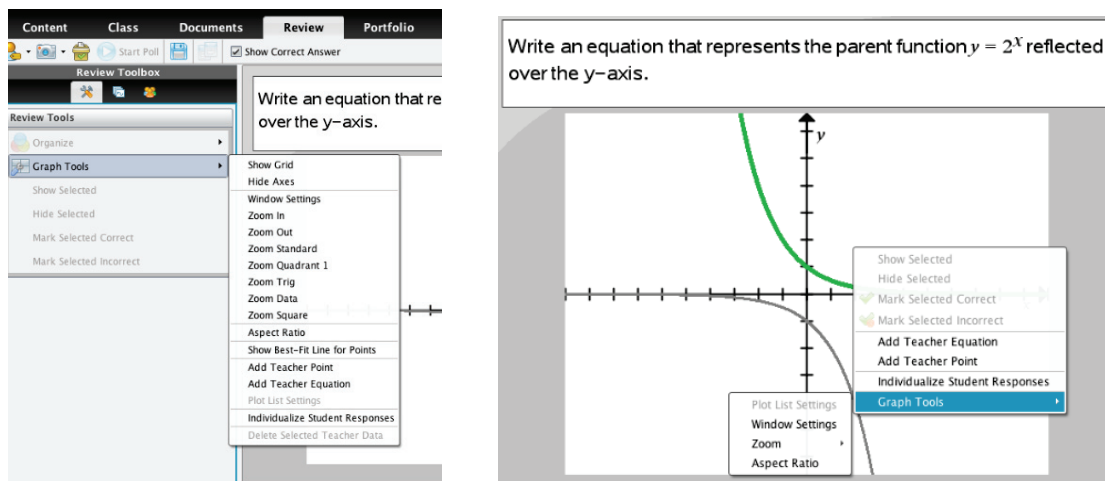
- The Show Work Data View is available when **Allow students to show their work** is selected before sending the Quick Poll.

Data Views for Coordinate Points & List(s) Questions



Graph Data View Options

The Graph Data View can be modified using the options in the Review Tools pane  of the Review Toolbox (the left column). Options include, but are not limited to, changing the window settings, adding a teacher point/equation, and individualizing student responses. Some of the options are available by right-clicking on the graph.






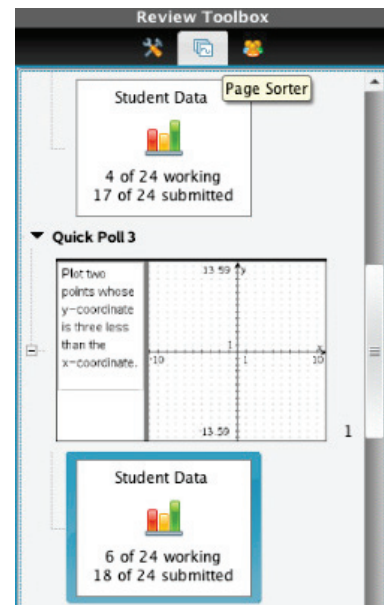
Tip Sheet: Quick Poll

TI PROFESSIONAL DEVELOPMENT

Viewing Previous Quick Poll Questions

The Page Sorter view  in the Review Toolbox allows the teacher to re-display previous Quick Poll questions for discussion.

1. Click on the Page Sorter pane in the Review Toolbox.
2. Scroll to the Student Data icon below the Quick Poll question you want, and click to view the student responses.

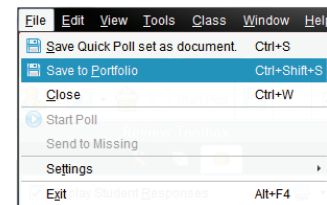


Saving Poll Results

The results from all Quick Poll questions sent during a class session are compiled in a Review Document and can be saved for review at a later time. The results will be placed in the Portfolio for the class.

1. Click the **Save** icon.

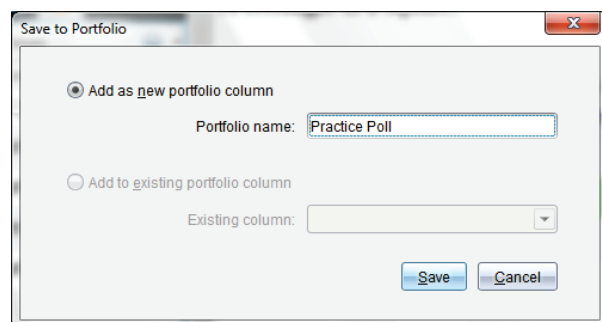
Alternatively, select **File > Save to Portfolio**.
2. If desired, enter a name to identify the Quick Poll results other than the default name, or add the results to an existing portfolio column (see the Portfolio Workspace capture to the right; each column is a Quick Poll or Collected Assignment).



	Math A	Bell BC	Generic Poll 1.0...	Generic, OP Set...	Generic, OP Set...	Generic
	30%	47%	68%	25%	---	---
03-03	03-03	03-03	02-19	02-19	02-19	02-19
	60%	14%	40%	25%	---	---
	0%	86%	60%	---	---	---
		43%	100%	---	---	---
			40%	---	---	---
			79%	80%	---	---
			64%	100%	---	---

Note: The first 15 Quick Poll questions of the class session will be stored in a single Review document, even if polls are sent after saving the Review document to the Portfolio. After the 15th question, a new Review document will start for the next 15 Quick Poll questions.

3. If the Review document is not saved before ending the class, the teacher will be prompted to save when the software is closed.



Tip Sheet: Sending Documents

TI PROFESSIONAL DEVELOPMENT


TI-Nspire™ CX Navigator™ Objective

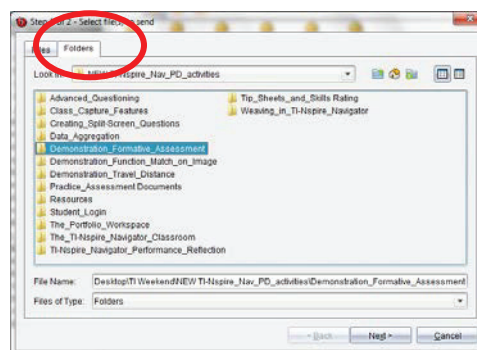
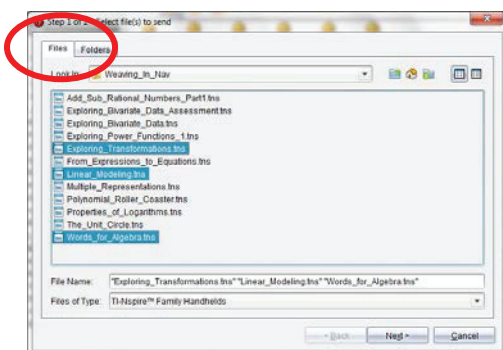
- Send documents to students using the TI-Nspire™ CX Navigator™ System.

TI-Nspire™ Navigator™ Features

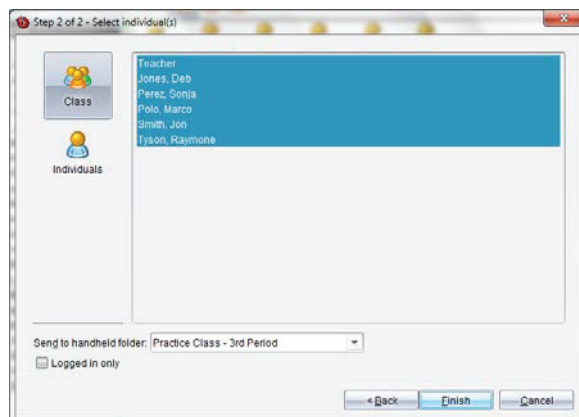
- Sending Documents
- Student Retrieval of Documents
- Verifying Transfer of Documents to Students

Sending Documents

- Open the TI-Nspire™ CX Navigator™ Teacher Software.
- Begin Class, and have the students log in to the TI-Nspire™ CX Navigator™ class.
- Click on the Send to Class icon. 
- Locate and select the documents you want to send to the class.
 - Use the **Ctrl** key on your keyboard to select nonconsecutive documents from a list.
 - If you would like to send an entire folder, click on the Folders tab, and select the folder to be sent to the students.



- Click **Next**.
- Select Class Send or Individual Student(s) Send.
 - If you would like to send to a subset of students only, highlight all of the desired students by holding the **Ctrl** key and clicking their names with your mouse.





Tip Sheet: Sending Documents

TI PROFESSIONAL DEVELOPMENT

7. The selected folder or document(s) will be sent to the student devices.
 - The default folder to which the document will be sent is **My Documents > TI-Nspire > Class Name** {the name of the class you created in TI-Nspire™ CX Navigator™}.
8. Click **Finish**.
 - You will see the sent document(s) listed in the Class Record. This line will also show how many students have received the documents.

Class Record		
Action	File Name	Status
	Words_for_Algebra.t...	4 of 6 ▶
	Multiple_Represent...	4 of 6 ▶
	Linear_Modeling.tns	4 of 6 ▶

Student Retrieval of Sent Documents

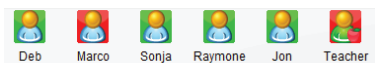
The students will receive the documents automatically upon log in.

- All students who are already logged in to the TI-Nspire™ CX Navigator™ classroom when you send the documents will automatically receive the documents.
- Students who have not yet logged in to the TI-Nspire™ CX Navigator™ class will receive the documents as soon as they log in to the class.

Verifying Transfer of Documents to Students

1. Select the document to be verified in the Class Record.
2. A color code system the Student View of the class indicates whether a student has successfully received the document(s).
 - If the document(s) was successfully received by the student, then the box will be green.
 - If the document(s) was not received by the student, then the box will be red.

Class Record		
Action	File Name	Status
	Words_for_Algebra.t...	4 of 6 ▶
	Multiple_Represent...	4 of 6 ▶
	Linear_Modeling.tns	4 of 6 ▶



Sending Documents Using the TI-Nspire™ Navigator™ NC System

Any type of document can be sent to students' computers using the TI-Nspire™ Navigator™ NC Teacher Software, even though students can only open TI-Nspire™ documents and PublishView™ documents in the TI-Nspire™ Teacher Software. All other documents can be opened in their native applications.

All documents sent using the TI-Nspire™ Navigator™ NC Teacher Software will be located in the TI-Nspire™ class folder on students' computers.

Tip Sheet: Collecting Documents

TI PROFESSIONAL DEVELOPMENT

TI-Nspire™ CX Navigator™ Objective

- Collect document from students using the TI-Nspire™ CX Navigator™ System.

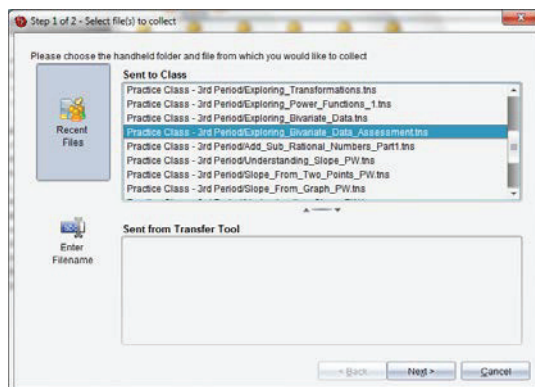
TI-Nspire™ Navigator™ Features

- Collecting Documents
- Student Transfer of Documents
- Verifying Transfer of Documents from Students

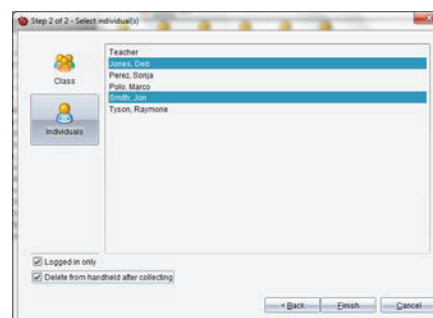
Collecting Documents from Students



- Click the **Collect from Class** icon.
- Select the file(s) to be collected, and click **Next**.
 - If you want to collect more than one file from the students, use the **Ctrl** key on your keyboard as you click the files in the list.
 - If you want to collect a file you recently sent to the class, click **Recent Files**, and the files that have been recently sent will be listed for your convenience.



- Select **Class**, or select individual student(s) by clicking **Individuals**, using the **Ctrl** key to select nonconsecutive students from the list.
 - By choosing to collect from the entire class with the “Logged in only” option selected, you will only collect the file(s) from students who are currently logged in to the class.
- If you want to delete the file from the student device, select the “Delete from student after collecting” option.
- Click **Finish**.
 - You will see the collected and deleted file(s) listed in the Class Record list on the TI-Nspire™ CX Navigator™ Home Screen.





Tip Sheet: Collecting Documents

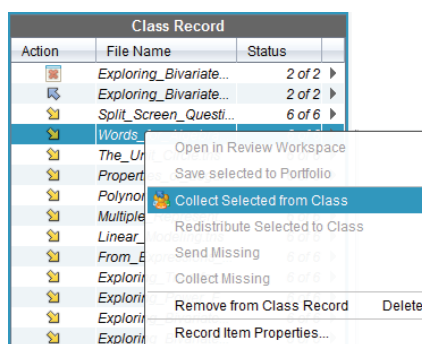
TI PROFESSIONAL DEVELOPMENT

- This line will also show how many of the students' files have been received.

Class Record		
Action	File Name	Status
	Exploring_Bivariate_...	2 of 2 ▶
	Exploring_Bivariate_...	2 of 2 ▶

Collecting Documents Alternative

- From the Class Record, right-click on the document to be collected.
- Select **Collect Selected from class**.



- The documents will automatically be collected from the class.

Note: There is no option to delete documents at the time of collection using this method. The teacher could use **Delete from Class** at a later time during the class session.

Verifying Collection of Documents from Student Computers

From the Class Record, select the file to be verified. The Student View of the class will indicate whether a document has been collected successfully.



- If the document was collected successfully, then the box will be green.
- If the document has not been collected, then the box will be red. This might be because the student is not logged in to the TI-Nspire™ CX Navigator™ class.
- If the document was not in the student's class folder, then the box will be yellow.

Collecting Documents Using the TI-Nspire™ Navigator™ NC Teacher Software


Any type of document can be collected and saved to the Portfolio using the TI-Nspire™ Navigator™ NC Teacher Software. For a non-TI-Nspire™ document, students must save their work before the teacher collects the document. Once a non-TI-Nspire™ document has been collected, it can be viewed or edited in its native application by going to the Portfolio Workspace, right-clicking the document, and selecting "Open for Editing."

Tip Sheet: Collecting Documents

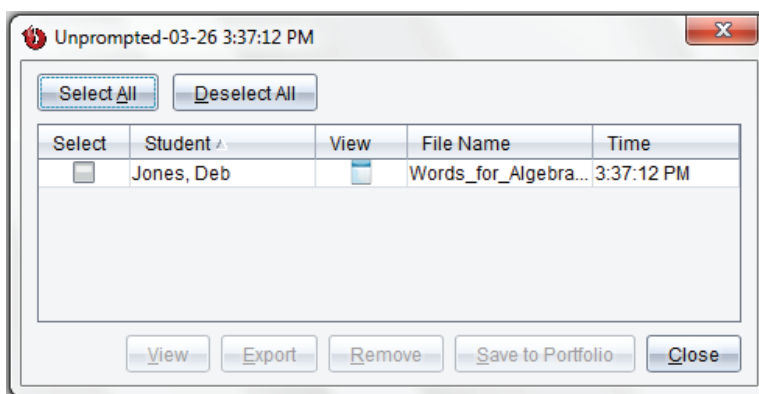
TI PROFESSIONAL DEVELOPMENT

Unprompted Documents from Class

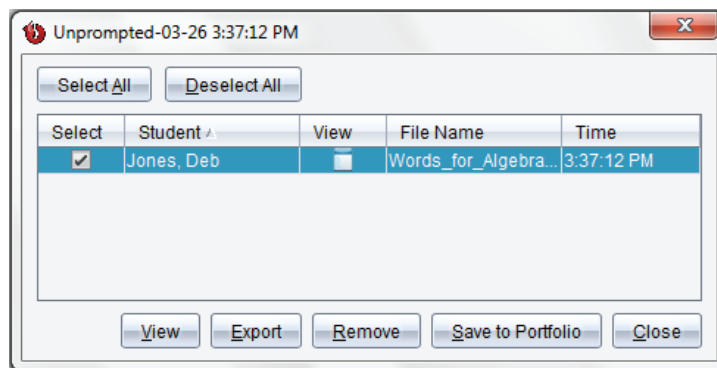
Students can send documents to the teacher without the teacher collecting from the class. When this happens, an unprompted file folder with the sent date will appear in the class record.

Class Record			
Action	File Name	Status	
	Unprompted-03-26	(1)	▶

- The number in the status column tells the teacher how many documents have been sent to the Unprompted folder.
- Double-clicking on the Unprompted folder will open a window.



- The teacher can select all the document of an individual student by clicking the checkbox in front of the document.
- Once you have selected the documents from the Unprompted folder, options at the bottom of the window become active.



View: This option opens the document(s) in the Teacher Software.

Export: This option allows the teacher to save the document to any location on the computer.

Remove: This option deletes the document from the Unprompted folder.

Save to Portfolio: This option allows the teacher to create a new column in the Student Portfolio or add the document(s) to a current column.

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Tip Sheet: Sending Documents via the Transfer Tool

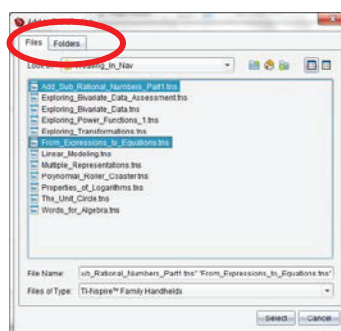
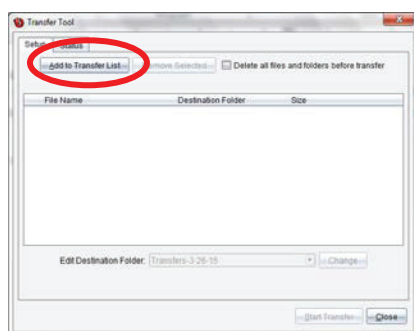
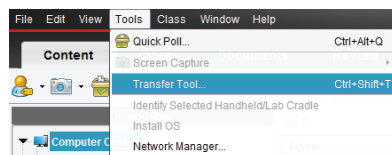
TI PROFESSIONAL DEVELOPMENT

TI-Nspire™ CX Navigator™ Objectives

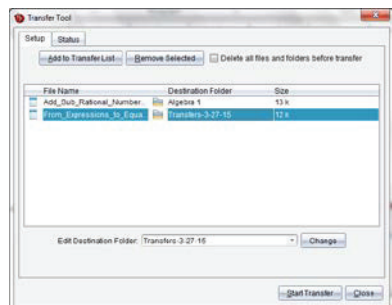
- Send documents to handhelds using the Transfer Tool.
- Delete all folders on connected handheld(s).

Send Documents to Connected Handhelds

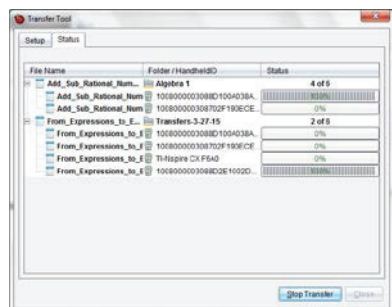
1. Open the TI-Nspire™ CX Navigator™ Teacher Software.
2. Select **Tools > Transfer Tool** (or use the keyboard shortcut **Ctrl+Shift+T**).
 - The Transfer tool is not available when a class is in session.
3. Click the **Add to Transfer List** button, and browse on your computer for the documents(s) to be transferred.
 - You can send an entire folder by clicking on the Folders tab and selecting the folder to be sent to the students.



4. You can change the folder to which the document(s) will be sent on the handheld.
 - The default folder is "Transfers-Date".
 - Edit the destination folder by clicking on the Destination Folder name and entering the name of the new Destination Folder.
 - Click **Change**.



5. Click **Start Transfer**.
 - The Transfer Tool Status window will indicate the status of the document(s) being transferred to individual handhelds.
6. When the file transfer is complete, click **Stop Transfer** and **Close**.



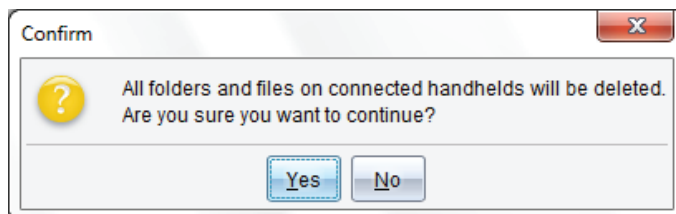
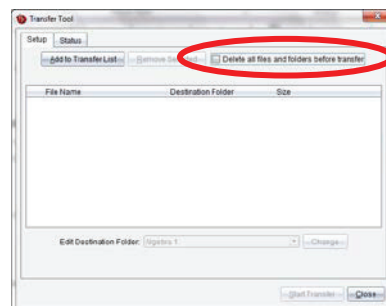


Tip Sheet: Sending Documents via the Transfer Tool

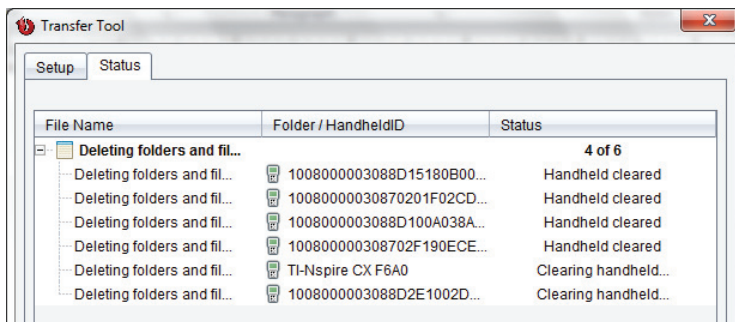
TI PROFESSIONAL DEVELOPMENT

Delete All Documents and Folders on Handheld

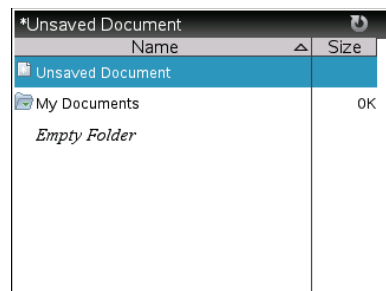
1. Open the TI-Nspire™ CX Navigator™ Teacher Software.
2. Select **Tools > Transfer Tool** (or use the keyboard shortcut **Ctrl+Shift+T**).
 - The Transfer Tool is not available when a class is in session.
3. Check the box to select “Delete all files and folders before transfer.”
 - If desired, add files to send to the handheld using the steps above. The files will be transferred to the handheld after all files and folders have been deleted.
4. Click **Start Transfer**.
 - A confirmation message will appear. Click **Yes** to continue with the delete.



- The Transfer Tool Status window will indicate the status of the folders and files being deleted to individual handhelds.



5. When the file transfer is complete, click **Stop Transfer** and **Close**.
6. The connected handhelds will contain no documents or folders except the My Documents folder.





Tip Sheet: Sending the Operating System via the Transfer Tool

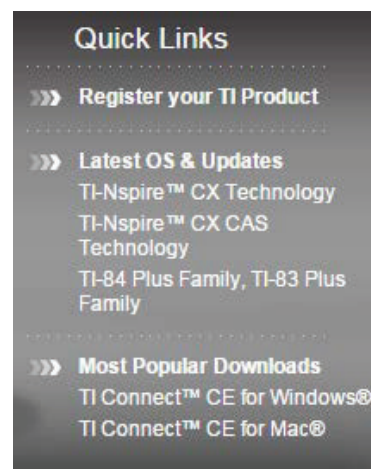
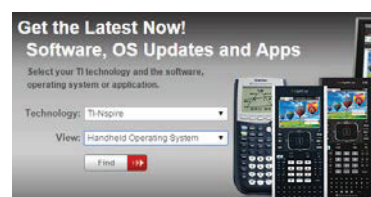
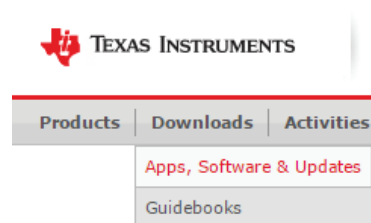
TI PROFESSIONAL DEVELOPMENT

TI-Nspire™ CX Navigator™ Objective

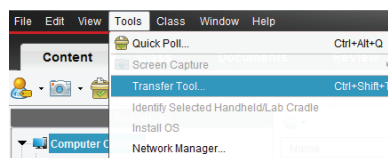
- Send an operating system (OS) to TI-Nspire™ CX handhelds using TI-Nspire™ CX Navigator™ Teacher Software.

1. Download the current OS to your computer.

- Visit www.education.ti.com to download the latest OS for TI-Nspire™ CX, TI-Nspire™, TI-Nspire™ CX CAS, and/or TI-Nspire™ CAS.
- Select **Downloads & Activities > Apps, Software & Updates**.
- From the drop-down menus, select the appropriate technology and handheld operating system. Then click **Find**.
- Select the name of the appropriate handheld.
- Select **Save**, and browse to a convenient download location on your computer, such as your Desktop.
- Alternatively, use **Quick Links** to access and save the latest OS.



- Open the TI-Nspire™ CX Navigator™ Teacher Software.
- Select **Tools > Transfer Tool** (or use the keyboard shortcut **Ctrl+Shift+T**).
 - The Transfer tool is not available when a class is in session.

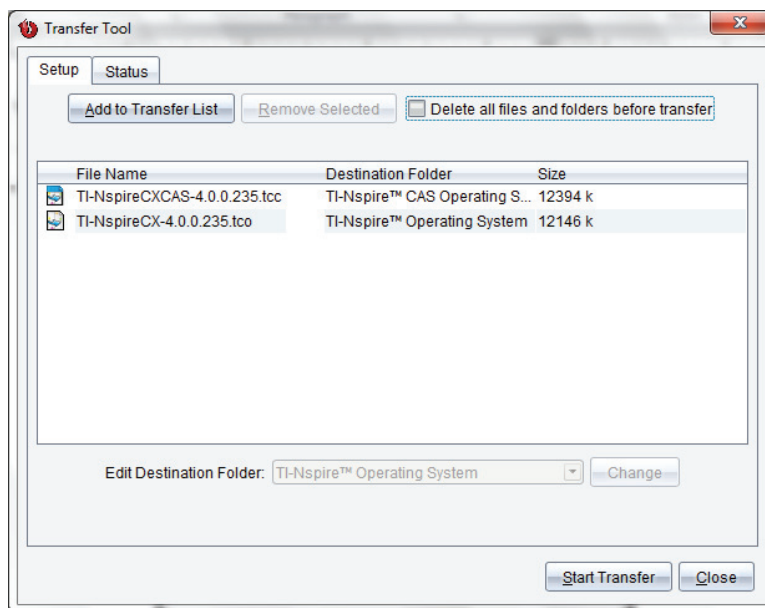




Tip Sheet: Sending the Operating System via the Transfer Tool

TI PROFESSIONAL DEVELOPMENT

4. Click **Add to Transfer List**, and browse on your computer for the OS file to be transferred.
 - You can select operating systems for each type of handheld.
 - If your class has more than one type of handheld, the Transfer Tool will update each handheld with the proper OS.



5. Click **Start Transfer**.
 - The Transfer Tool Status window will indicate the OS being transferred to individual handhelds.
6. When the file transfer is complete, click **Stop Transfer** and **Close**.

Tip Sheet: Modifying TI-Nspire™ Assessment Documents

TI PROFESSIONAL DEVELOPMENT

Activity Overview

Create a custom TI-Nspire™ question document from pre-made state assessment documents found online.

Materials

- Internet access

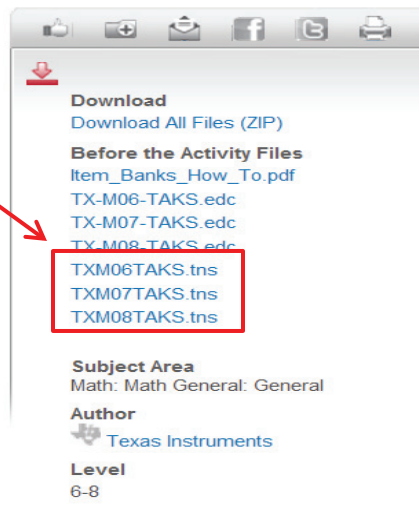
Downloading State Assessment TI-Nspire™ Documents

Released state assessment questions are available online for many states, already formatted as questions in TI-Nspire™ documents. Teachers might want to use some of these Question pages from a large state assessment document for formative assessment or for student practice.

1. Open the web site **education.ti.com**.
2. Hover your cursor over the Activities tab and select **All Activities**.
3. Select **Search by Keyword**. Type the name of your state's assessment and select **Search**.
4. Select an activity from the list of results. Select a document to download, and click on that document.

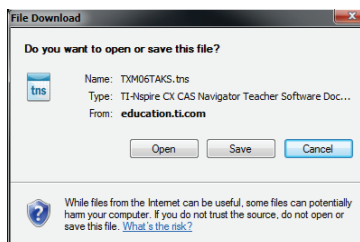
- TI-Nspire™ documents have the extension **.tns**.

Note: This example uses a document with practice exam questions from Texas.



5. When the File Download dialog box appears, click **Save** to save the document.
6. Select the Desktop as the location to which the document should be saved.



- The TI-Nspire™ document icon with the file name will be located on the desktop.



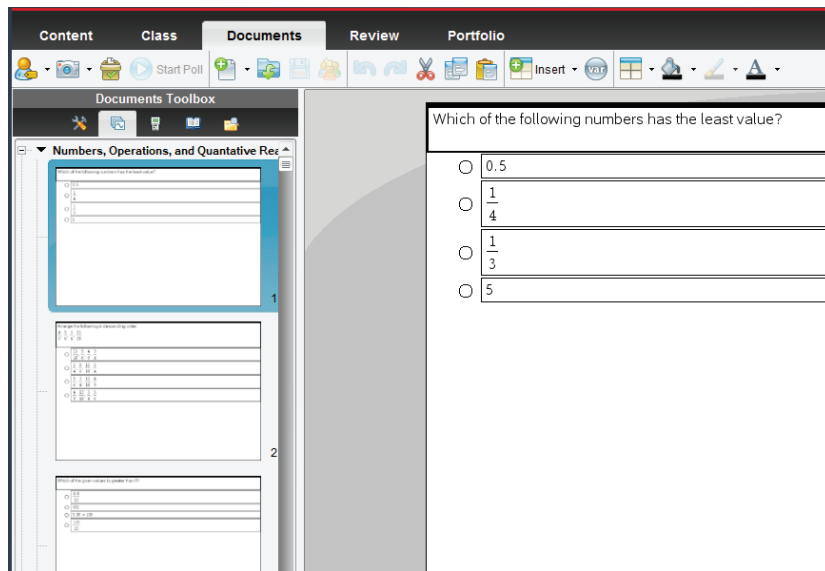
Tip Sheet: Modifying TI-Nspire™ Assessment Documents

TI PROFESSIONAL DEVELOPMENT

Opening State Assessment Document

- In the Documents Workspace, click on the **Open a document** icon .
 - Alternatively, select **File > Open Document**.
- In the Open dialog box, click the Home icon  to access the computer Desktop.
- Click on the TI-Nspire document you just downloaded, and then click **Open**.

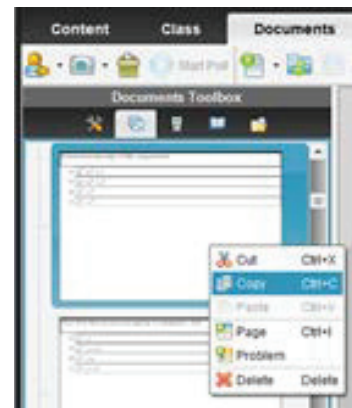
Note: If the **Page Sorter** pane in the Documents Toolbox is not displayed, select it.



- Use the scroll bar in the Page Sorter view to scroll through and preview the questions in the document.
 - Alternatively, click on a page in the Page Sorter view and arrow up or down to preview questions.

Copy/Paste Questions to a New Document

- To select a question to be included in your custom assessment document, right-click on the question page in the Page Sorter view, and select **Copy**.
 - Alternatively, click on the question page in the Page Sorter view, and press **Ctrl+C** on your keyboard.



Tip Sheet: Modifying TI-Nspire™ Assessment Documents

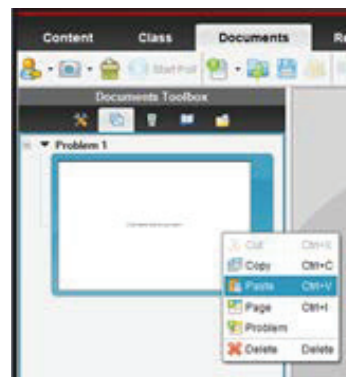
TI PROFESSIONAL DEVELOPMENT

2. Select **File > New TI-Nspire Document**.

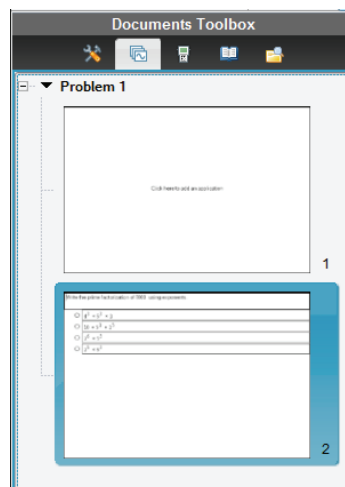
- A new document will open in the Page Sorter view.

3. Right-click on the page in the Page Sorter view, and select **Paste**.

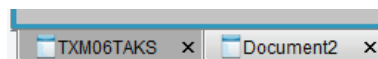
- Alternatively, click on the page in the Page Sorter view and press **Ctrl+V** on your keyboard.



- The pasted question page is inserted after the first, blank page of the new document. The first page can be used to provide directions for the students, or it can be deleted.



4. Return to the state assessment document by clicking on the document name at the bottom of the screen.



5. Select another question page in the Page Sorter view of the state assessment document. Right-click on that page, and select **Copy**.

6. Click on the tab for the new document - Document2, in this example. In the Page Sorter view of the new document, right-click on the last page, and select **Paste**.

7. Repeat steps 4 through 6 to copy as many questions to the new document as desired.

Note: The order of the questions can be changed by dragging and dropping the question pages in the Page Sorter view.

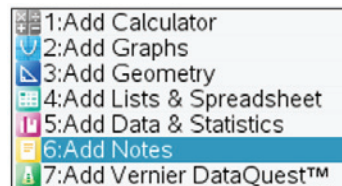
8. When finished, press **Ctrl+S** to save the new document. Enter a name, and choose a location for the new document.

Tip Sheet: Modifying TI-Nspire™ Assessment Documents

TI PROFESSIONAL DEVELOPMENT

Adding Instructions to the New Document

1. To make the first page of the new document a Notes application page to provide directions, click on that page in the Page Sorter view.
2. Click in the large version of the page in the right work area.
3. From the list of applications, select **Add Notes**.
4. Enter the desired text.



Note: To delete the first page of the new document, right-click on the page in the Page Sorter view. Select **Cut** or **Delete**.

TI-Nspire™ CX Keypad Shortcuts

TI PROFESSIONAL DEVELOPMENT











Activity Overview

The following keypad shortcuts can be used to perform common functions on the TI-Nspire™ CX family of handhelds. Many shortcuts can also be used in the TI-Nspire™ and TI-Nspire™ CAS Teacher Software, as well as by selecting options from various menus and submenus.





















Getting Help

Open Hints ctrl 

Editing Text

Cut	ctrl 
Copy	ctrl 
Paste	ctrl 
Undo	ctrl  or ctrl 
Redo	ctrl  or  
Toggle approximate and exact results	ctrl 
Change key to include appropriate accent	

Inserting Characters and Symbols in a Document

Display character/symbol palette	ctrl 
Underscore	ctrl 
Display math template palette	
Backslash	 
Manual data capture point	ctrl 
Clear	ctrl 
Caps lock	ctrl 
Store	ctrl 
Square brackets	ctrl 
Curly brackets	ctrl 
Display Trig symbol palette	
Equals symbol	
Display pi symbols palette (π , l , θ , and so on)	
Display equality/inequality palette ($>$, $<$, \neq , \geq , \leq , $ $)	ctrl 
Display marks and letter symbols palette (? ! \$ ' " : ; _ \)	
Square root	ctrl 
log	ctrl 
ln	ctrl 
ans	ctrl 

Managing Documents

Open document menu	doc ▾
Open document	ctrl O
Close document	ctrl W
Create new document	ctrl N
Insert new page	ctrl I
Select application	ctrl K
Save current document	ctrl S or ctrl 



Navigation

Top of page	ctrl 7
End of page	ctrl 1
Page up	ctrl 9
Page down	ctrl 3
Up a level in the hierarchy	ctrl ▲
Down a level in the hierarchy	ctrl ▼
Context menu for selection	menu
Extends selection in direction of arrow	⇧ shift any arrow

Navigating in Documents

Displays previous page	ctrl ◀
Displays next page	ctrl ▶
Displays Page Sorter	ctrl ▲
Exits Page Sorter	ctrl ▼
Switch between applications on a split page	ctrl tab
Moves focus backward within a page	⇧ shift tab

Wizards and Templates

Add a column to a matrix after the current column	⇧ shift ←
Add a row to a matrix after the current row	⇩
Integration template	⇧ shift +
Derivative template	⇧ shift -
Math template palette	 or ctrl 
Fraction template	ctrl ÷


TI-Nspire™ CX Keypad Shortcuts

TI PROFESSIONAL DEVELOPMENT

Modifying the Display

Increase contrast	ctrl	+
Decrease contrast	ctrl	-
Power off	ctrl	 on

Using Application-Specific Shortcuts

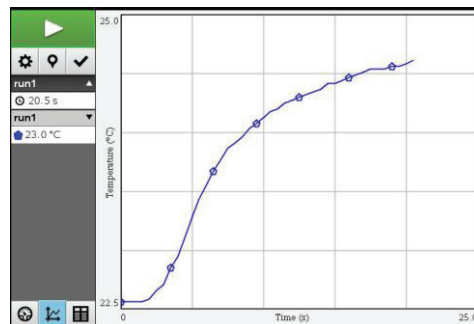
Select all in Notes or Program Editor	ctrl	A
Check syntax and store (in Program Editor)	ctrl	B
Find (in Program Editor)	ctrl	F
Hide/Show Entry Line (in Graphs or Geometry)	ctrl	G
Go To (in Lists & Spreadsheet, Program Editor)		
Find and Replace (in Program Editor)	ctrl	H
Insert Math Box (in Notes)	ctrl	M
Open the Scratchpad		
Recalculate (in Lists & Spreadsheet)	ctrl	R
Add Function Table (in Lists & Spreadsheet, Graphs, and Geometry)	ctrl	T
Group/ungroup	ctrl	4 / ctrl 6

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Using DataQuest on a Handheld

This appendix gives an overview of using the Vernier DataQuest application on a TI-Nspire handheld. It includes information on accessing the common tools in the DataQuest Application.

DataQuest is included in TI-Nspire computer software versions 3.0 and newer. **This appendix shows screenshots for TI-Nspire computer software version 3.6 and newer.** If you have an older version of TI-Nspire software, you can get updates at education.ti.com.



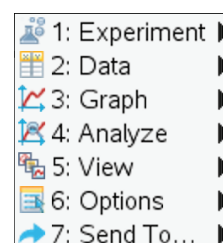
The TI-Nspire Software

Access Menus

DataQuest can be used to collect, display, and analyze data. Most features can be accessed using the application menus. To access the menus, press **menu**.

Access Context Menus

To access context menus, move the cursor over the object using the touchpad or arrow keys, and press **ctrl menu**. Meters, View details boxes, graphs, and the table all have contextual menus.



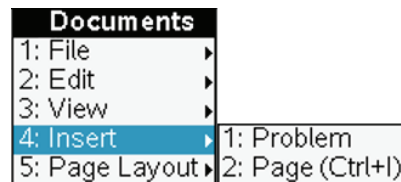
Open a New Document

To open a new document, press **ctrl on** then select New Document. Having only one TI-Nspire document opened when using DataQuest is recommended.



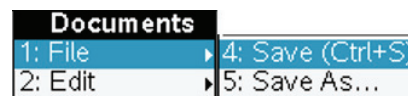
Add a Page or Problem

To add a new page or problem to your TI-Nspire document, press **doc** (**ctrl on** for clickpad handhelds) and choose Problem or Page from the Insert menu. For touchpad handhelds, you can also add a page by pressing **ctrl doc**.



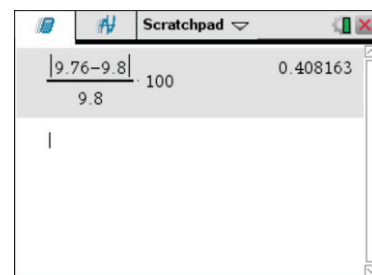
Save a document

To save your TI-Nspire document, press **doc** (**ctrl on** for clickpad handhelds) and choose Save from the File menu or press **ctrl S**.



Scratch Pad Calculator

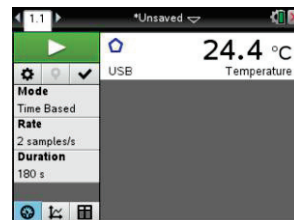
The Scratch Pad Calculator is a built-in calculator that can be used to perform calculations while you are conducting an experiment. To use the Scratch Pad Calculator, press **calc**. (On a click pad handheld, press **on** then select the Scratchpad Calculate option.)



Appendix B

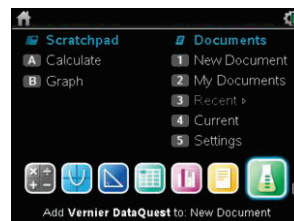
Start DataQuest

DataQuest should automatically start when you connect a TI-Nspire Lab Cradle, EasyLink interface, EasyTemp temperature probe, or Texas Instruments CBR 2™ motion detector to your handheld.



Manually Launch DataQuest

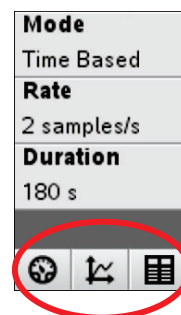
To start DataQuest manually, press **[home]** then select **[DataQuest]**. You can also press **[doc]** (**[ctrl]** **[home]** for clickpad handhelds) and choose Vernier DataQuest from the Insert menu.



Views in DataQuest

There are three views in the DataQuest application: Meter, Graph, and Table. Click a tab to change views or press **[menu]** then choose the desired view from the **[View]** menu.

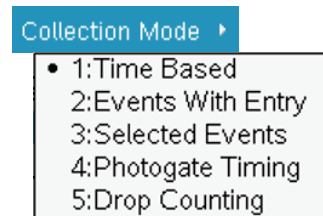
On the left side of the screen in each view, you will see the View details box. The Meter View details box shows the data-collection settings. The Graph View details box shows graph trace and analysis information. The Table View details box shows data set variable information.



Data Collection Settings

Change the Data-Collection Mode

1. Press **[menu]** then choose Collection Mode from the **[Experiment]** menu.
2. Select the data-collection mode you want to use.



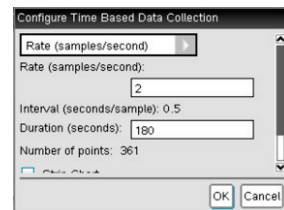
Note: Changing modes will require you to discard any collected data. To avoid losing data, save the current document and open a new document, or insert a new problem in the current document.

3. A dialog showing the data-collection settings for the mode you have selected will be displayed. Adjust the settings as desired for your experiment. Use **[tab]** to move between entry lines.
4. When you are done setting up the data collection, select OK.

Change Data-Collection Settings

When you have already set up the data-collection mode and want to make changes to the settings, you can change the values you have entered.


1. Press **[menu]** then choose Collection Setup from the **[Experiment]** menu.
2. Make the necessary changes and select OK.

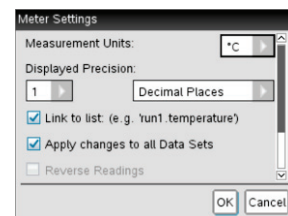


Note: You may also make changes to the Rate and Duration of the experiment by clicking on the Rate or Duration box in the Meter Details area.

Sensor Settings


Change Units

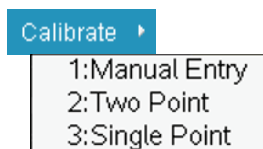
1. Press **menu** then choose Set Up Sensors ► Name of Sensor from the  Experiment menu or click the sensors meter to display the Sensor Settings dialog box.
2. Choose the measurement units from the drop-down menu. You can also choose the sensor's precision, color and point marker from this dialog.



Calibrate a Sensor

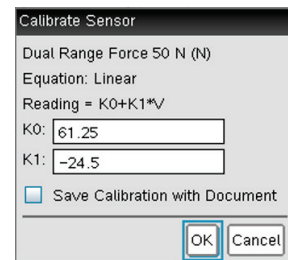
Not all sensors can be calibrated. Check the sensor booklet for specific information about your sensor. For most experiments, the sensor's stored calibration is recommended. In some instances, you may want to calibrate a sensor to get readings that are even more accurate.

1. Press **menu** then choose Set Up Sensors ► Calibrate from the  Experiment menu. Select the appropriate calibration option for your situation:




- Manual Entry – Use Manual Entry when you know the calibration equation and want to enter the coefficients directly.
- Two Point – Use Two Point for most calibrations.
- Single Point – Use Single Point when only one known calibration value is attainable (for example, calibrating a Barometer to match the current atmospheric pressure). Single Point calibration will only affect the intercept of the calibration equation.

2. Perform a live calibration (Two Point or Single Point).
 - a. Place the sensor in the desired calibration environment, enter the reference value, wait for the voltage readings to stabilize, and select Keep.
 - b. Two Point only – place the sensor in a second calibration environment, enter the reference value, wait for the voltage readings to stabilize, and select Keep.
3. Note the updated calibration equation, modify if necessary (Manual Entry), and select OK.

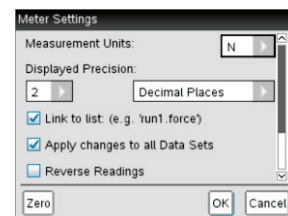


Zero a Sensor

Not all sensors can be zeroed. Check the sensor booklet for specific information about your sensor.

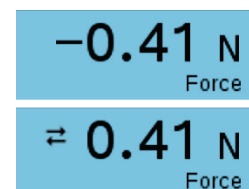
To zero a sensor, press **menu** then select Set Up Sensors ► Name of Sensor from the  Experiment menu or click the sensor's meter. If you can Zero the sensor, a Zero button is located in the lower left corner of the dialog.

Note: When you have more than one sensor you want to zero, select the All Sensors option.




Reverse a Sensor


Not all sensors can be reversed. Check the sensor booklet for specific information about your sensor.

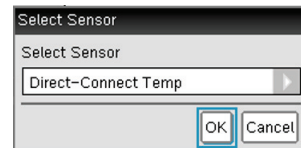


Appendix B

Press **[menu]** then choose Set Up Sensors ► Reverse from the  Experiment menu. The sign of the sensor reading is changed as noted in the example.

Sensors that do not Auto-ID

The DataQuest Application supports older sensors that do not auto-ID. To manually set up a sensor, connect the sensor to the interface and the interface to your handheld. Press **[menu]** then choose Advanced Set Up ► Configure Sensor from the  Experiment menu, and select the interface and channel your sensor is connected to. Select your sensor from the drop down list and click OK.



Sensors that do not auto-ID must be set up everytime they are used and will not be identified by the software when opening a saved file.

Data Collection

Start Data Collection

To start data collection, click the Start Collection button or press **[menu]** then choose Start Collection from the  Experiment menu.



Keep Data Points (Event Based Data Collection)

To store a data point during Events with Entry or Selected Events experiments, click the Keep button or press **[menu]** then choose Keep from the  Experiment menu.




Stop Data Collection

To stop data collection, click the Stop Collection button or press **[menu]** then select Stop Collection from the  Experiment menu.



Extend Data Collection (Time Graph Collection)

To extend a time graph experiment to one and one-half times the current duration, press **[menu]** then choose Extend Collection from the  Experiment menu before or during a collection. The time listed in the menu will be the new duration for the experiment.



Store Data Sets

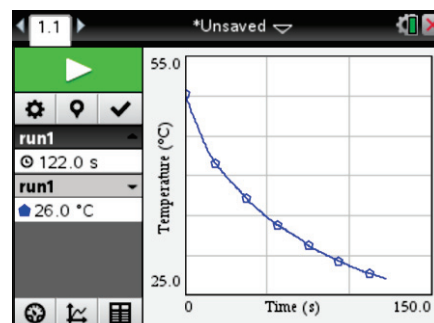
To store a data set, click the Store Latest Data Set button or press **[menu]** then choose Store Data Set from the  Experiment menu.



Graphical Display of the Data

By default, DataQuest will graph the most recent (latest) data set on the graph. When two or more of the same type of sensor are connected, data from those sensors will be plotted on the same graph.

When you have two different types of sensors connected, data from the different sensors will be plotted on two separate graphs.

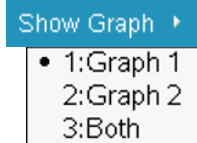


Using DataQuest on a Handheld

When a Motion Detector is connected, two graphs will be displayed – position and velocity.

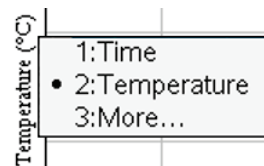
Show Graphs

To change the graph displayed, press **[menu]** then select Show Graph from the **[Graph]** menu. You can select Graph 1, Graph 2, or Both. The two graphs can have different dependent (y-axis) data with different ranges; however, they must have the same independent data and range.



Change what is graphed on the axes

To change the data columns plotted on a graph, move the cursor to the axis label and press **[ctrl][F5]**, or press **[menu]** then select X-Axis Column or Y-Axis Columns from the **[Graph]** menu. Select from the available columns. Use the More option to plot multiple columns on the same axes.

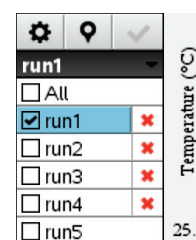


Change which data set is graphed

To plot a different data set or multiple data sets on the same graph, click the run indicator or press **[menu]** then choose Select Run from the **[Graph]** menu.

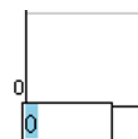
Select All to display all data sets.

Select the runs to display. You can display any combination of stored data sets.



Adjust the Graph Window Settings

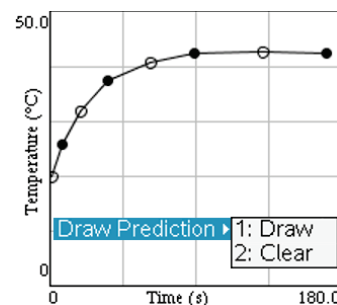
To manually adjust the window settings, click the axis labels or press **[menu]** then choose Window Settings from the **[Graph]** menu.



Draw Prediction

Use the draw prediction feature before data collection to predict the outcome of the data collection. To add a prediction to a graph, press **[menu]**, choose Draw Prediction from the **[Analyze]** menu, then select Draw. Click the graph in the desired locations. When finished press **[esc]**.

To remove a prediction, press **[menu]** then choose Draw Prediction from the **[Analyze]** menu, and select Clear.

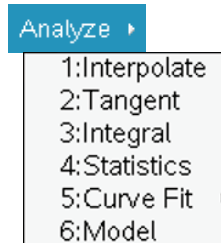


Analyze Data

You can perform multiple types of analysis on your data. For most analysis options, the results will apply to all data points unless a region of data is selected first. Press **[menu]** then choose your desired analysis option from the **[Analyze]** menu.

Interpolate

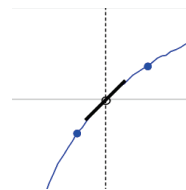
Use Interpolate to examine a graph trace between and beyond the graphed data points. The examine line will move from pixel to pixel instead of data point to data point. This is recommended when examining curve fits.



Appendix B

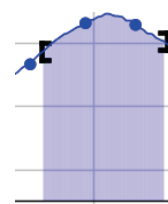
Tangent

Use Tangent to get a measure of the rate of change of the data at a specific point. A segment is drawn on the graph to help visualize the rate and the rate of change (labeled slope) is displayed in the Graph View details box.



Integral

Use Integral to get a measure of the area between your data and the x-axis. Find the area under all data points or under a selected region of the data. You can adjust the region used by clicking and dragging the brackets. The integral region is shaded on the graph and the area is displayed in the Graph View details box.



Statistics

Use Statistics to find minimum, maximum, mean, and standard deviation of your data. Find these values for all data points or a selected region of the data. You can adjust the region used by clicking and dragging the brackets. The statistical values are displayed in the Graph View details box.

Samples: 101
min: 0.163
max: 0.593
mean: 0.394
dev: 0.127

Curve Fits

Use Curve Fits to find the best-fit equation of a curve fit function. Curve fit all data points or a selected region of the data. You can adjust the region used by clicking and dragging the brackets. The curve fit equation is graphed on the axes and the equation values are displayed in the Graph View details box.

Curve Fit ▾

- 1:Linear
- 2:Quadratic
- 3:Cubic
- 4:Quartic
- 5:Power (ax^b)
- 6:Exponential (ab^x)
- 7:Logarithmic
- 8:Sinusoidal
- 9:Logistic ($d \neq 0$)
- A:Natural Exponential
- B:Proportional

Model

Use Model to manually fit a mathematical equation to your data. A model differs from a Curve Fit in that there are no statistical or iterative processes used to determine the best fit. You can define your models using any function of the variable x .

To enter a model:

1. Press **menu**, then choose Model from the **Analyze** menu.
2. Select one of the predefined equations or enter your own. The model must be a function of the variable x .
3. Enter your estimates for the coefficient values.
4. Modify the spin increment value if desired.
5. Select OK.

Set Coefficient Values

$f(x) = a*(x-h)^2+k$

a: -4.90

Spin Increment: 0.010

h: 1.000

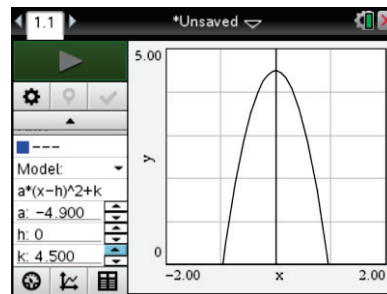
Spin Increment: 0.100

k: 1.000

OK Cancel

You can adjust the coefficients in your model to obtain a good match of your data.

- Click on the spin increment buttons .
- Click on the coefficient and type a new value.
- Move the cursor to the Graph View Details, press **ctrl** **menu** then select the Modify Model option.



Remove an analysis feature from a graph

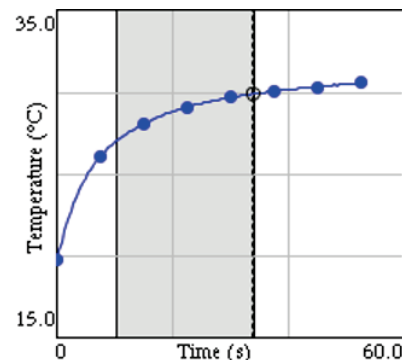
Use the remove option to remove an analysis (integral, statistics, curve fit, or model) from a graph. To do this, press **[menu]** then choose Remove from the **[Analyze]** Analyze Menu. If there are more than one, the analysis options will be listed in the order in which they were created.

Select a Region on a Graph

Select a region when you want to look more closely at a specific region of data or analyze only a portion of the data.

To select a region:

1. Move the cursor to the place you want to start the selected region.
2. Press **[ctrl]** **[Analyze]** to start the selection.
3. Move the cursor to select the region.
4. Press **[Analyze]** or **[esc]** to end the selection.

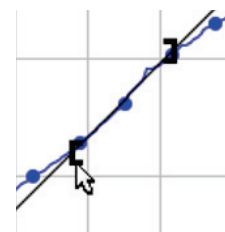


The selected region is indicated by shading. Once a region is selected, you can:

- Zoom in on the region (Press **[menu]** then choose Zoom In from the **[Graph]** Graph menu).
- Analyze the region (see above).
- Strike the data within or outside the selected region (see below).

Modify the range of an analysis

Once you have used one of the analysis tools, you can modify the range over which the analysis will apply. To do this directly on the graph, move the cursor over one of the brackets, when the cursor changes to a white arrow, press **[ctrl]** **[Analyze]** to grab the bracket, then use the touch pad or arrow keys to move the bracket. Press **[esc]** to release the bracket.



To do this from a menu, move the cursor over the Graph View details box, press **[ctrl]** **[menu]**, then choose the Modify Range option. If you have more than one analysis, choose the one you want to adjust or choose the Modify All option to apply the change to all of the existing ranges.

Strike Data

When there are data points that you wish not to have considered in the graphing or analysis of your data, you can “strike” that data. Striking data does not delete the data; rather, data is displayed in the data table with a single line drawn through it and calculated column cells based on struck data will be blank. Struck data is not displayed on the graph.

	Time	Temp
3	1.0	20.9
4	1.5	21.6

To strike data, select a region, press **[menu]**, then choose Strike Data from the **[Data]** Data menu. Select whether to strike through data inside or outside the selected region.

Strike Data ▾

1: In Selected Region
2: Outside Selected Region

Restore Data

Use this option to restore struck data. Select a region (optional), press **[menu]** then choose Restore Data from the **[Data]** Data menu. Select whether to restore data In Selected Region, Outside Selected Region, or Restore All Data.

Restore Data ▾

Appendix B

Tabular Display of the Data

DataQuest also displays data in a data table. In addition to viewing collected sensor data, you can enter data manually and perform column calculations. Use the scroll bar and scroll buttons to view the data.

Data collected will populate the Latest Data Set in the table. This data set is identified with **red, bolded text** on CX handhelds (**bolded text** on other handhelds) in the Table View Details box. Storing a Data Set will change the data set identified as the Latest.

	run1		run2		
	Time	Temp	Time	Temp	
run1	1	0	22.7	0	26.5
Time (s)	2	0.5	22.7	0.5	26.5
Temperature...	3	1.0	22.8	1.0	26.5
run2	4	1.5	22.8	1.5	26.4
Time (s)	5	2.0	22.8	2.0	26.4
Temperature...	6	2.5	22.9	2.5	26.5
run1	7	3.0	23.0	3.0	26.5
Time (s)	8	3.5	23.2	3.5	26.6
Temperature...	9	4.0	23.5	4.0	26.7
run2	10	4.5	23.7	4.5	26.8

Data Set Options

To change the name of a run or to add notes about the data set, double-click the run name or move the cursor to the table, press **ctrl** **menu** then select Data Set Options.

Data Set Options

Name:

Notes:

Column Options

Use the column options to change the name of the column and to modify the display precision of any column. Press **menu**, choose Column Options from the **Data** menu, then select the column you wish to modify.

Calculated Columns

Calculated columns are used to generate data based on existing columns in a data set. For example, you may want to calculate gravitational potential energy from height measurements or you may want to linearize pressure-volume data by plotting pressure vs. the reciprocal of the volume data.

To add a calculated column, press **menu** then choose New Calculated Column from the **Data** menu. The equation you enter must use one of the data columns in the data set.

run1
Time (s)
Position (m)
Velocity (m/s)
Acceleration (m/s ²)
GPE (joules)
1.28*9.8*Position

Manually Entered Data

For experiments that require hand-entered data, launch DataQuest in a new document or problem without any sensors connected. Use the default *x* and *y* columns to manually enter data values. You can use the Column Options to rename your columns if desired (see above).

To add additional manual columns, press **menu** then choose New Manual Column from the **Data** menu.

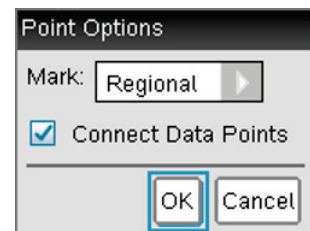
	run1	
	x	y
1	5.00	18.60
2	10.00	5.8
3	15.00	-22.50

DataQuest Options

Points Options

Use the point options to determine how the data are drawn on the graph. To access the Point options, press **[menu]** then choose Point Options from the **[Options]** menu.

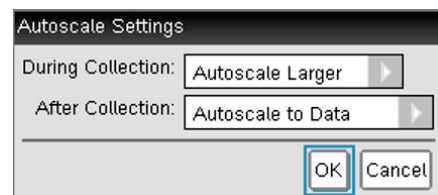
Mark refers to the symbol used to distinguish the different traces on a graph. The Mark options are None, Regional, or All. You can also choose whether to have the data points drawn connected.



Regional/Connected is the default for Time Graph data collection. All/Not Connected is the default for Event based data collection.

Autoscale Settings

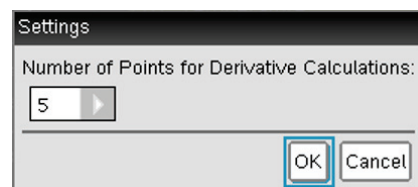
Use the Autoscale Settings to set the scaling behavior of the application during and after data collection. To access Autoscale Settings, press **[menu]** then choose Autoscale Settings from the **[Options]** menu.



- Autoscale Larger – expands the graph range when needed to ensure each data point appears on the graph. This is the default setting and only applies while collecting data.
- Autoscale From Zero – adjusts the graph range to ensure all data points and the origin (0,0) are displayed with little or no extra space. This only applies after collection is complete.
- Autoscale to Data – adjusts the graph range to show all data points with little or no extra space around the points. This is the default setting and only applies after data collection.
- Do Not Auto Scale – maintains the current window range regardless of the collected data. This can be applied either during or after collection.

Derivative Settings

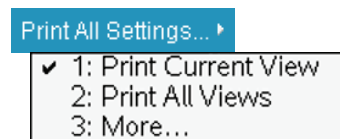
Use the derivative settings to set the number of points used in derivative calculation. The default value is five. To access this setting, press **[menu]** then choose Derivative Setting from the **[Options]** menu.



Print All Settings

Use the Print All settings to determine which DataQuest views are printed when the Print All printing option is used. Choose from Print Current View (default), Print All Views, or select any one or combination of views to print. The Print All Settings are specific to each DataQuest App so multiple instances of the app must be set up separately.

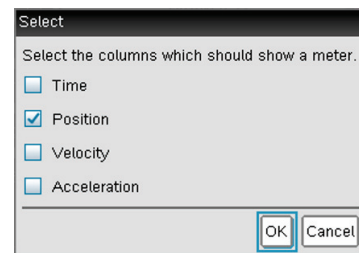
To access Print All Settings, press **[menu]** then choose Print All Settings from the **[Options]** menu. **Note:** You cannot print a document directly from a handheld. You can only print from the TI-Nspire computer software.



Appendix B

Show/Hide Meters

You can display (or hide) a meter for any column of data. This is useful for calculated columns of data. To select which meters to display, press **menu** then choose Show/Hide Meters from the **Options** menu. **Note:** Meters for calculated columns will only show live values during data collection.

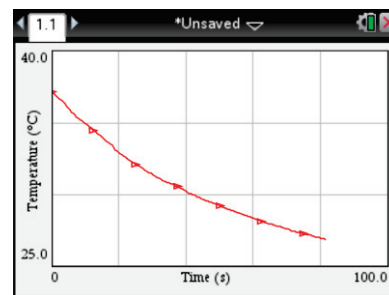


Hide View Details (Show View Details)

The View details boxes, tabs, and collection buttons can be hidden if desired. To hide the View details, press **menu** then choose Hide View Details from the **Options** menu. When the details are hidden, use the menus to change views and control data collection.

Note: View details will automatically be hidden in some split screen views and when the application window gets too small.

To show View details when they are hidden, press **menu** then choose Show View Details from the **Options** menu.



Print a Document

You cannot print a document directly from a handheld. You can only print from the TI-Nspire computer software. See *Appendix C* for more details regarding printing.

Battery Level

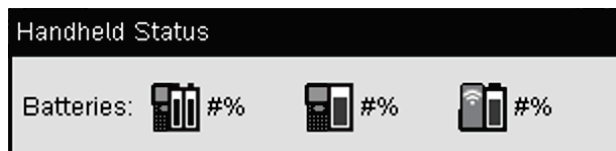
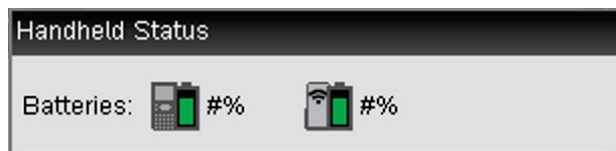
The battery icon located in the upper right portion of the screen will display the current battery level available to the handheld. Move your cursor over the battery icon to get an approximate percent of battery life remaining. The level is a combination of all battery types that apply – handheld AAA, handheld rechargeable, and Lab Cradle rechargeable.



For more detailed information regarding the charge level of the different battery types, press **on**, choose Settings, then select Status.









We recommend not letting your battery level go below 25% as this can affect the identification of your sensors.

The TI-Nspire Lab Cradle can be used to collect data on a handheld while powered using the AC adaptor that comes with the Lab Cradle.











DataQuest Cursors

The DataQuest application uses several different cursors to help identify when there is some special feature available to you through mouse interaction (clicking, right-clicking, clicking and dragging, etc.). The table below will give you a brief explanation of the different cursors used.

Cursor	Description
	Pointer – The standard cursor you see when using DataQuest.
	<p>Horizontal Resize Cursor – This cursor is shown when you are over the location of an object that can be resized in a horizontal direction. The locations where the Horizontal Resize cursor appears are:</p> <ul style="list-style-type: none"> ▶ The right edge of and View Details box in Meter, Graph and Table View. This will allow you to resize the details box. ▶ The left one-third of the horizontal (x-) axis. This allows you to dynamically adjust the x-min window-setting value without changing the x-max value. ▶ The right one-third of the horizontal (x-) axis. This allows you to dynamically adjust the x-max window-setting value without changing the x-min value. ▶ The left edge of a table cell. This allows you to adjust the width of the column to the left of the cursor. <p>Press ctrl  to grab the object and resize it. After the object has been grabbed, the cursor changes to . Move the cursor left or right to resize the object. Press esc to release the object.</p>
	<p>Vertical Resize Cursor – This cursor is shown when you are over the location of an object that can be resized in a vertical direction. The locations where the Vertical Resize cursor appears are:</p> <ul style="list-style-type: none"> ▶ The space between two DataQuest graphs when both graphs are shown. This will allow you to resize the two graphs as desired. The default is to show both graphs the same height. ▶ The top one-third of the vertical (y-) axis. This allows you to dynamically adjust the y-max window-setting value without changing the y-min value. ▶ The bottom one-third of the vertical (y-) axis. This allows you to dynamically adjust the y-min window-setting value without changing the y-max value. <p>Press ctrl  to grab the object and resize it. After the object has been grabbed, the cursor changes to . Move the cursor left or right to resize the object. Press esc to release the object.</p>
	<p>Translation Cursor – This cursor is shown when you are over the location of an object that can be repositioned up-and-down or left-and-right. The locations where the Translation cursor appears are:</p> <ul style="list-style-type: none"> ▶ The middle one-third of the horizontal (x-) axis. This allows you to dynamically adjust the x-min and x-max window setting values by the same amount, simultaneously. The graph will appear to move left or right. ▶ The middle one-third of the vertical (y-) axis. This allows you to dynamically adjust the y-min and y-max window setting values by the same amount, simultaneously. The graph will appear to move up and down.

Appendix B

	Press ctrl  to grab the object and resize it. Move the cursor to resize the object. When you move the object, the cursor changes to  . Press esc to release the object.
	Text Edit Cursor – This cursor is shown when you are over the numeric graph-axis labels. Press  to edit the value. Press enter to save the change. Press esc to exit without making a change.

Cursor	Description
	<p>Hollow Pointer – This cursor is shown when the object underneath is selectable in some way. The locations where the Hollow Pointer appears are:</p> <ul style="list-style-type: none"> ▶ The graph-axes text label. Press ctrl menu to change what is graphed on the axis. ▶ The analysis selected-region brackets ([or]). Press ctrl  to grab a bracket. Move the cursor left or right to adjust the region used in the analysis calculation. Press esc to release the bracket.
	<p>Pencil Cursor – This cursor is shown when Draw Prediction is active. Move the cursor to the desired location and press  to add a point. Repeat as necessary. Press esc to end your prediction.</p>

The Press-to-Test Feature

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Activity Overview

The Press-to-Test feature enables you to quickly prepare student handhelds for exams by temporarily disabling folders, documents, and select features and commands. Steps 1-7 in this activity enables Press-to-Test. To disable Press-to-Test, you will need to follow Steps 8-9 using either an additional TI-Nspire handheld or a computer with the TI-Nspire Teacher Software.

Materials

- TI-Nspire™ handheld-to-handheld or handheld-to-computer USB connection cable

Step 1:

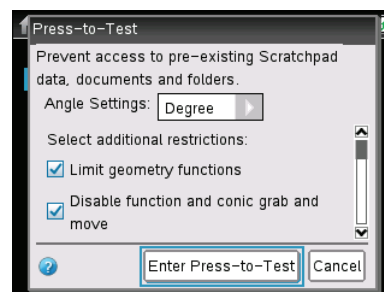
To enable Press-to-Test on the TI-Nspire™ with Touchpad and TI-Nspire CX™, first ensure that the handheld is turned off. Press and hold **esc** and **on** until the Press-to-Test screen appears.



Note: To enable Press-to-Test on TI-Nspire™ with Clickpad, press and hold **esc**, **on**, and **off on**.

Step 2:

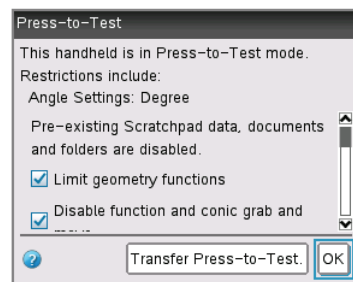
By default, Press-to-Test disables pre-existing Scratchpad data, documents, and folders as well as many other functionalities of the handheld. The angle settings can be changed by pressing **▶**, selecting the appropriate setting, and pressing **▶** or **enter**.



By default, all of the commands and features listed are disabled. To enable a feature or command, uncheck its box. Keep all boxes checked, and enter Press-to-Test by clicking **Enter Press-to-Test**.

Step 3:

Once the handheld is in Press-to-Test mode, the handheld reboots. A dialog box confirms that the handheld is in Press-to-Test mode and the restrictions are listed. Click OK.



Step 4:

When in Press-to-Test mode, the LED at the top of the handheld begins blinking. Green indicates that all restrictions are selected (default), while yellow indicates that one or more restrictions are unselected. During the initial reboot, the LED alternates between red and, depending on the restrictions, either green or yellow.



The Press-to-Test Feature

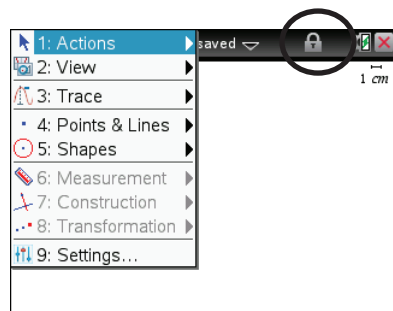
TI PROFESSIONAL DEVELOPMENT

Step 5:

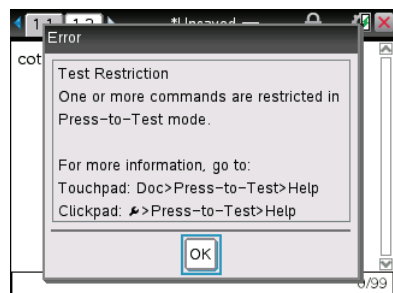
Create a new document, add a Geometry page, and press **menu**.

Since geometry functions are limited, observe that the **Measurement**, **Construction**, and **Transformation** menus are not accessible.

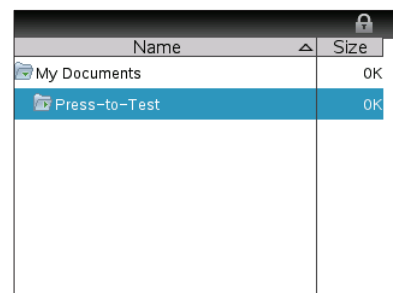
Note: The lock icon at the top of the screen indicates that the handheld is in Press-to-Test mode.

**Step 6:**

Add a Calculator application by selecting **doc** > **Insert** > **Calculator**. Type $\cot(\pi/2)$ and press **enter**. Since trigonometric functions are limited, an error message appears. The dialog box tells students how to access additional information about the restrictions. Click OK.

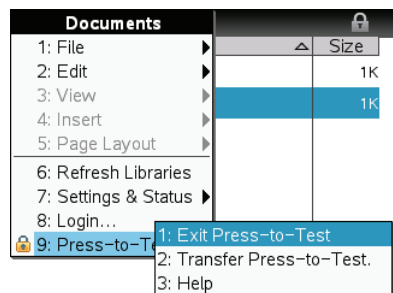
**Step 7:**

Select **on** > **My Documents**. While in Press-to-Test mode, a Press-to-Test folder appears in My Documents. All other folders and documents present on the handheld before Press-to-Test mode was entered are inaccessible.

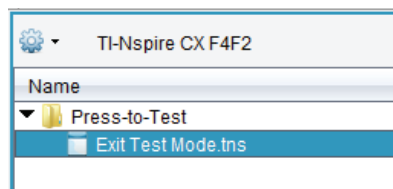
**Step 8:**

To exit Press-to-Test mode, connect two handhelds using the handheld-to-handheld USB connection cable. Then select **doc** > **Press-to-Test** > **Exit Press-to-Test**. The Exit Press-to-Test option appears regardless of whether the other handheld is in Press-to-Test mode.

Press-to-Test can also be exited with the TI-Nspire™ Navigator™ Teacher Software. Once a class has been started, students can select **doc** > **Press-to-Test** > **Exit Press-to-Test**.

**Step 9:**

Press-to-Test can also be exited with TI-Nspire Teacher Software or TI-Nspire Navigator Teacher Software by creating a document named **Exit Test Mode.tns**, and transferring it to connected handhelds.



Note: The name of the TI-Nspire document must be spelled exactly as it is above.

Go to the Tools menu and select **Transfer Tool**. Click **Add to Transfer List** and select **Exit Test Mode.tns**. In the Edit Destination Folder, enter the name of the folder Press-to-Test, and click **Change**. Then, click **Start Transfer**.

TI-Nspire™ Technology

Approved for Tests	TI-Nspire™ CX	TI-Nspire™ CX CAS
	TI-Nspire™ w/Touchpad	TI-Nspire™ CAS w/Touchpad
SAT*	•	•
AP*	•	•
PSAT/NMSQT*	•	•
ACT*	•	
International Baccalaureate	•	
Praxis™	•	•
Texas STAAR® Grade 8	•	
Texas STAAR® Algebra	•	

Graphing Technology

Approved for Tests	TI-84 Plus CE	TI-89 Titanium
	TI-84 Plus C Silver Edition TI-84 Plus Silver Edition TI-84 Plus, TI-83 Plus	
SAT*	•	•
AP*	•	•
PSAT/NMSQT*	•	•
ACT*	•	
International Baccalaureate	•	
Praxis™	•	•
Texas STAAR® Grade 8	•	
Texas STAAR® Algebra	•	

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TI-Nspire™ CX Navigator™ Skills Rating

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- Rating Scale: 0 – Not covered yet
 1 – Uncertain – need more instruction
 2 – Moderate – need more practice
 3 – Average – comfortable
 4 – Good – competent

TI-Nspire™ CX Navigator™ Skill	Day 1	Day 2	Day 3
Class Workspace:			
• Create a Class			
• Add/Modify Students			
• Teacher Preferences			
Class Capture:			
• Auto-Refresh Class Capture			
• Zoom In/Out			
• Reordering Screen Captures			
• Saving Screen Captures			
• Screen Stacks			
Live Presenter			
Document Management:			
• Send to Class			
• Collect from Class			
• Delete from Class			
• View files collected from class			
• Save to Portfolio			



TI-Nspire™ CX Navigator™ Skills Rating

TI PROFESSIONAL DEVELOPMENT

Quick Poll:			
• Multiple Choice			
• Open Response			
• Equations and Expressions			
• Coordinate Points & Lists			
• Image			
• Chemistry			
• Review Student Data			
Review Workspace:			
• Mark Correct Answer(s)			
• Change Data View for appropriate question types			
• Data Aggregation			
Portfolio Workspace:			
• Edit Scores			
• Send Missing Documents			
• Collect Missing Documents			
• Redistribute Documents			