

Learning the Basics of Nspire

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Activity overview

Introduce your students to some of the basic operations and functions of the TI-Nspire with simple directions and small steps

Concepts

The students will do basic computations, simple data entry in a spreadsheet, and manipulation of a simple geometric figure.

Teacher preparation

Load “Lexington.tns” onto the handhelds in your classroom. Preview the program and its activities before handing it to your students

Classroom management tips

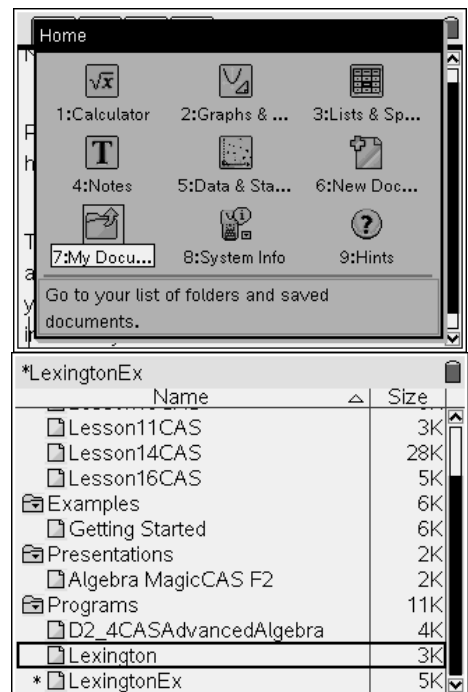
The program may work best with students individually or in groups of 2. The teacher will need to monitor the students as they progress through the program. The completed programs can be downloaded to the teacher’s computer to be assessed and student proficiency determined.

TI-Nspire Applications

This program can be used on TI-Nspire or TI-Nspire CAS.

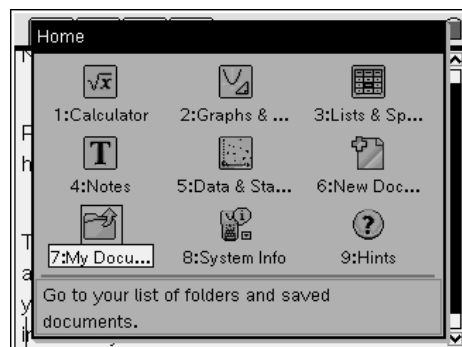
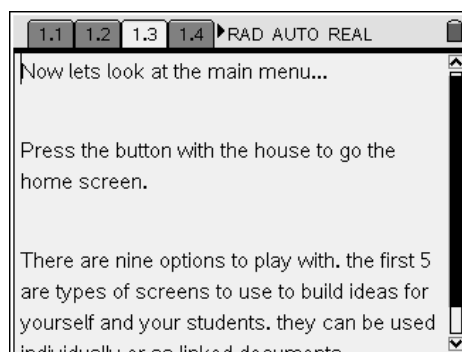
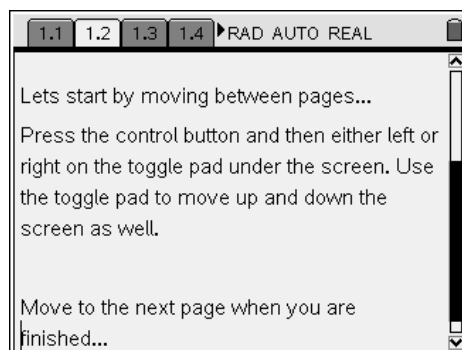
Step-by-step directions

1. Have the students open up “Lexington.tns” from the “My Documents” screen



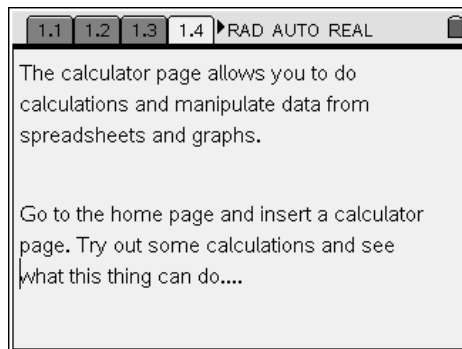
2. Help the students maneuver thru the first few pages as a class to be sure that the students understand the key strokes needed to follow the instructions on each new page.

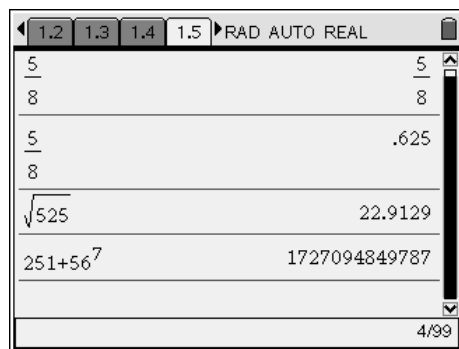
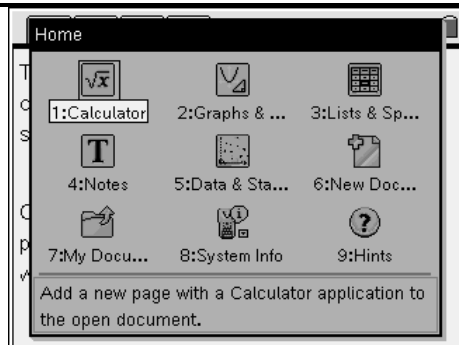
Remind your students to press “esc” to get out of any menu or operation they no longer need.



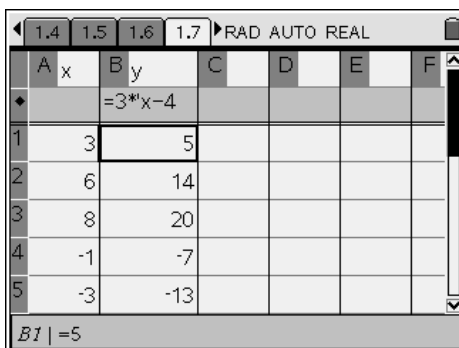
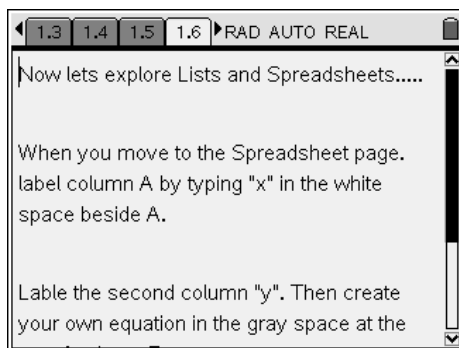
3. Have a list of operations to perform on the board as the students try out the calculator operations.

If the program is being used on a CAS unit, you may have to explain some of the computational difference between the TI-84 and the Nspire.



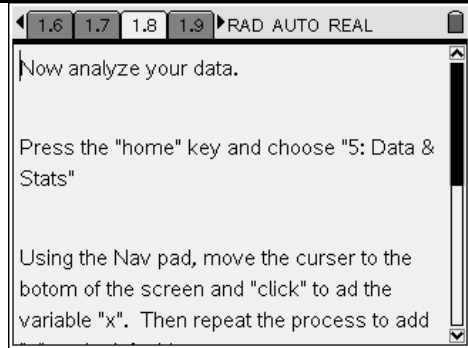


3. Let the students choose their own equation (in "y=" form) to insert in the spreadsheet.



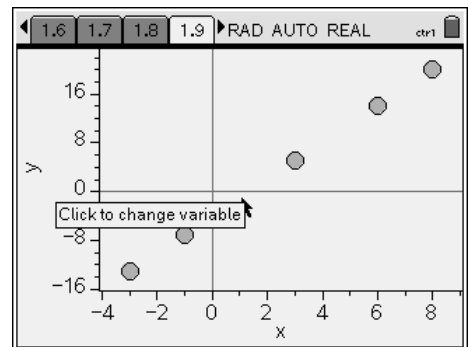
4. Help the students find and label their “Data and Statistics” page to get the scatter plot and “line of best fit”.

For “Data and Statistics” page, press “Home” and choose “5: Data & Statistics”.



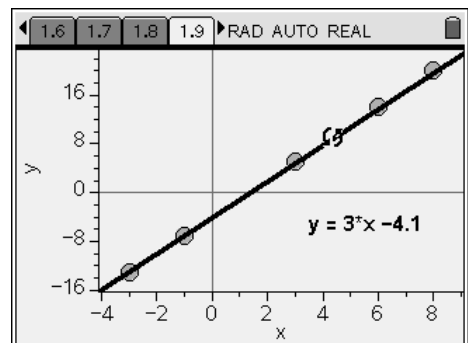
Move the cursor to the bottom of the page and “click” (center of Nav pad) to choose “x” for the horizontal axis.

Move the cursor to the left of the screen and “click” to choose “y” for the vertical axis.



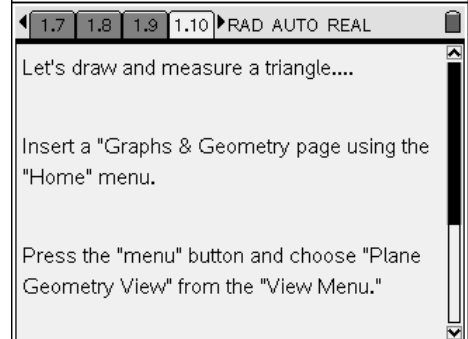
Press the “menu” button and choose “2: Add Moveable Line” from the “3: Actions” menu.

Place the cursor over the line and hold down the center of the Nav pad to choose and move the line to create the “line of best fit”. Students may have to use “esc” and move the place held on the line to get the line to move through all the points.

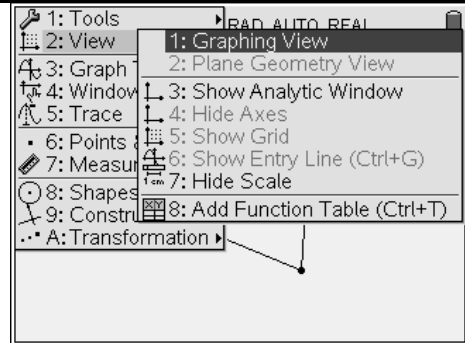


5. Help the students find and format their “Graphs & Geometry” page.

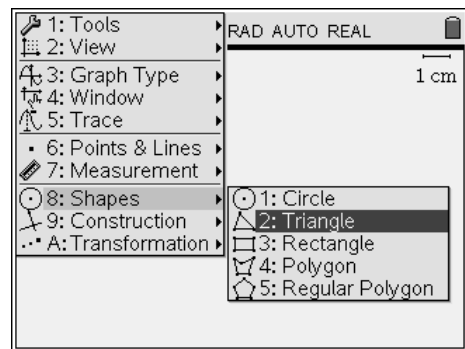
For “Graphs & Geometry” page, press “Home” and choose “2: Graphs & Geometry”.



Press the “menu” button and choose “2: Plane Geometry View” from the “2: View” menu.

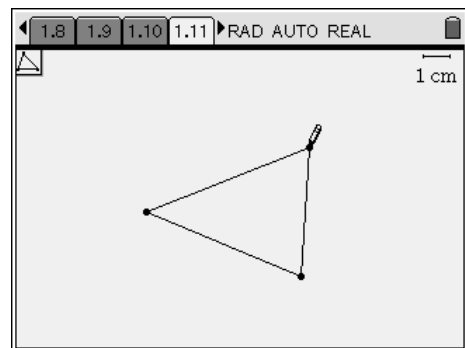


Press the “menu” button and choose “2: Triangle” from the “8: Shapes” menu .

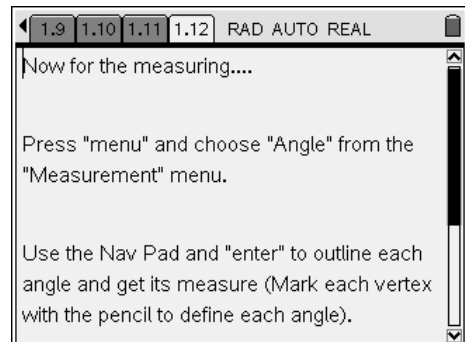


Move the cursor around the screen and “click” (press the button in the center of the Nav pad) 3 times to create the triangle.

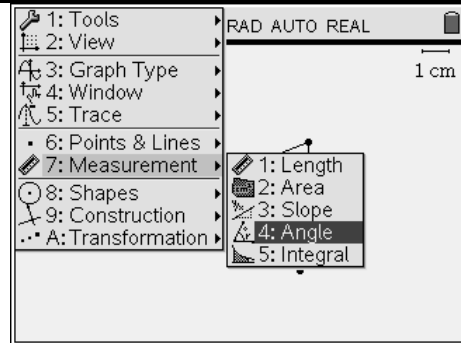
Remind your students to press “esc” when they finish drawing their triangle so they can complete the next steps.



6. Remind the students to navigate back to pg 1.11 to complete this part of the exercise.

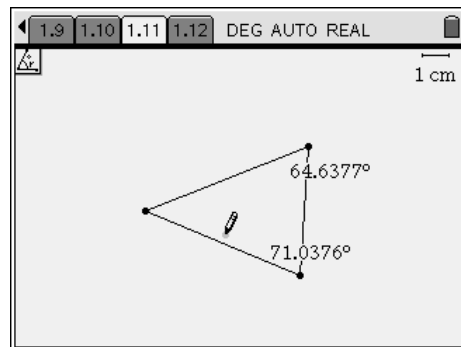


Press the “menu” button and choose “4: Angle” from the “7: Measurement” menu.



Trace each angle by “clicking” on each vertex to trace out the angle. Then move the angle measure with the Nav pad and “click” to place it in the correct angle. Do this for each angle of the triangle.

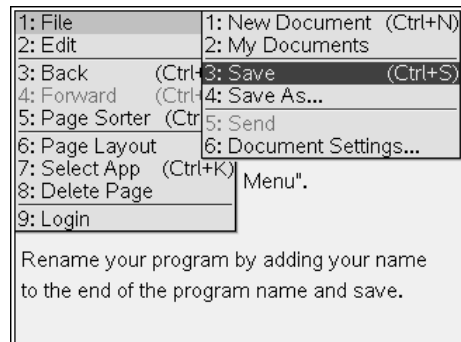
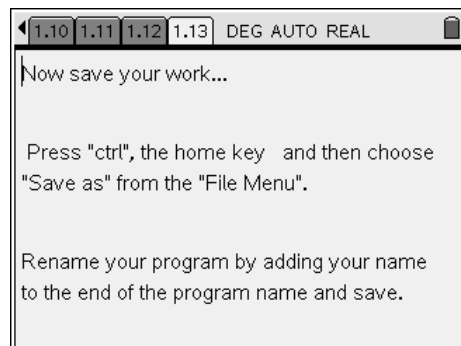
Remind students to press “esc” after all three angles can be traced so they can go on to the next step.



7. Press “ctrl” and the home key to get the menu for saving documents.

Choose “4: Save As” from the “1: File” Menu to give your document a new name.

This can be your opportunity to set procedures for saving completed documents (ie. “Block1GeoLeanneH for Block 1 Geometry Leanne Hankins”).



Assessment and evaluation

- *Success in this activity can be judged by the student's comfort level when operating the handheld. There are a few questions that the students can answer either on the handheld or on the student hand out that begin to link mathematical and geometric concepts to manipulation of material on the handheld.*
- *Basic operations of the handheld can be reviewed and reinforced each time the handheld is used in the classroom.*
- *The screenshots in the teacher instructions include sample pages for student generated work.*

Activity extensions

- *If used with the CAS unit, manipulation of functions and equations can be further explore through the calculator screens.*
 - *Manipulation of the triangle can lead to discussions of basic properties of triangles and angle manipulation.*
 - *Manipulation of data on spreadsheet pages and connection through Data and Statistics pages can introduce the variety of ways to display and analyses data.*
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Student TI-Nspire Document

Open "Lexington" from the "Programs" folder in "My Documents"

Follow the directions on each page to work your way through this introduction to the TI-Nspire. Use "ctrl" and the left & right arrows on the round Nav pad to move between pages.

There are some problems for you to try and some questions for you to answer on several of the pages.

Scroll through each page before you follow the directions on each page.

Use the screen shots below to track your progress through the program.

