





A Scavenger Hunt for the TI-Nspire Touchpad





Getting to Know You





1. Where is the "ON" key? _____
 - a. Turn the Nspire handheld on.
 - b. What picture is on the key? _____

2. Where is the small round button labeled "ctrl?" _____
 - a. What color is the button? _____
 - b. What else is the same color? _____
 - c. When this key is pushed followed by another key the feature listed above the key becomes active.
 - a. How do you turn the handheld off? _____ Try it!
 - b. Were you successful in turning the handheld off? _____
 - c. Find the key with "ans" in blue. It uses your previous answer for the next calculation.
 - d. What shape is the blue above the divide button? _____

3. What key is located under the  "on" key? _____
 - a. What is the blue above the  "doc" key? _____


4. Where is the menu key? _____
 - a.   is like a right click on the computer (context menu).

5. Where are the letter keys? _____





6. The Click button is located in the center of the Touchpad.
- What body part appears on the click button? _____
 - The **enter** key can also be used to “Click.”
 - A point or object is selected by
 - ctrl**  Or by simply pressing and holding .
7. The black keys along the sides and top are operational keys.
- Find the four keys for addition, subtraction, multiplication and division.
 - Where are they located? _____
 - Where is the key that looks like a book? _____
 - This is a powerful tool that allows access to the calculator’s catalog.
8. See if you can find the delete (del) button. What shape is it? _____
-  is the backspace key.
 - To clear a line at once you press **ctrl**  buttons in sequence.
 - To undo the last entry, try **ctrl** **esc** or **ctrl** **Z**.
 - To “redo” press **ctrl** **Y**.
9. What picture does the key below **esc** have on it? _____
- It is the shortcut to the Scratchpad. We’ll explore it later.
10. To adjust the contrast,
- HOLD **ctrl** and press **+** to darken the screen or
 - HOLD **ctrl** and press **-** to lighten it.
11. Explore the other keys on the Nspire. Also observe their secondary functions.

Exploring Home





When in doubt, GO HOME!!!!

- a. Turn the Touchpad on again.
- b. Press  to go Home if necessary. What options are listed under Scratchpad?

- c. What are the first two options listed under Documents? _____
You will also see three other options: Recent, Current, and Settings.
- d. How many ICONS allow you to Add a page? _____
- e. Choose Settings.
 - i. If someone has changed languages, how do you correct it?

 - ii. Which option would you use the change from radians (default) to degrees? _____
 - iii. How would I change the Font Size? _____
 - iv. Choose Status (go back to Settings if necessary)
 1. How much battery life is left? _____
 2. What version of operating system is being used? _____
 3. What is the serial number? _____
 - a. Use the  key to move between options until ABOUT has a HEAVY BORDER then . The Product ID is the serial number.
 - b. Press   to go back HOME.

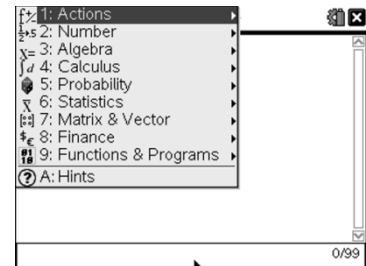
Let's do some ciphering!

12. From HOME select
 - a. New Document
 - b. It is your option whether to save or not.
 - c. Add Calculator
 - d. You can add a new page to your current document by selecting the  icon.
 - e. A blank page appears with a tab labeled 1.1 appears in the top left. This means you are in Problem 1, Page 1. If you did not start with New Document this tab may be different.
 - f. _____ appears in the bottom right of the screen.
13. Evaluate:
 - a. $\sqrt{289}$ Record your answer _____
 - i. Hint: Type in   289 .

- b. 12^2 Record your answer _____
- i. Hint: Type in 12 x^2 enter .
- c. $[4 - 3(2 - 4)^3 - 7]^2$ Did you get 441?
- i. Hint: Type $[4 - 3(2 - 4) \wedge 3 - 7] \text{x}^2$ and press enter . _____ Make sure after the second three, press down or right on the Touchpad to exit exponent mode.
- d. Type in 25 \div 4 enter . What did you get? _____ Press ctrl enter .
 What happened? _____ Type in 25 \cdot \div 4. What happened this time? _____ Summarize your observations: _____

- e. What do you think the 4/99 that appears in the bottom right of the screen means?

14. Press menu . Does your screen look like this? _____



- a. Explore each of these menus using the up/down arrow keys on the Touchpad.
- b. Press menu , Number, Convert to Decimal enter .
- i. Record your answer. _____
- ii. Note: ctrl enter also converts to a decimal.
- c. Press menu , Number, Fraction Tools. Select Proper Fraction and press enter .
 Type 56/9 and press enter .
- d. What does this represent? _____
- e. Press \blacktriangle on the Touchpad twice until a black box appears around the problem.
 Press enter and edit
- f. Use ctrl T to add a table. Which points verify above? _____, _____
- i. "Undo" until table is gone. (ctrl esc)
- g. Use ctrl G to add another line, or up (TouchPad) to edit f(1).
- h. ctrl G again, will close the entry line (Toggles)

- i. Clear the entry line the problem using the Touchpad and the **(del)** to change the 6 to 7 then **(enter)**. What do you notice? _____
- j. Press **(menu)**, Actions. Clear History will clear your page of calculations.

I'm Inspired to do some graphing!

- 15. Press **(ctrl)** **(doc v)** to insert a new page. Choose Add Graphs.
- 16. In the entry line, after $f(1)=$ type "2x-6" **(enter)**.
 - a. Where does the line cross the y axis? _____ x axis? _____
- 17. Press **(menu)** and explore each of the menu options using the arrow keys on the Touchpad. Under which option can you add a grid to your graph? _____
 - a. Did you successfully add a grid to your graph? _____
 - b. How many graph types are there? _____
 - c. What figure appears beside Measurement? _____



**If you have time, you can go on at your own pace.

- 18. Plot points (2,2) and (4,-2) on graph paper.
 - a. Count rise over run to find the slope of the line. _____
 - b. Now use the Slope Formula $(y_2-y_1)/(x_2-x_1)$ to find the slope.
 - i. Now on your handheld, press **(menu)**, Points & Lines. (make sure your grid is showing for this part)
 - ii. Choose Point.
 - 1. What shape appears next to the word point? _____
 - iii. ***Lightly move your finger*** across the Touchpad to move cursor to (2,2) (**point on** appears) **(enter)**.
 - iv. Do the same to plot (4,-2).
 - v. Press **(menu)**, Points & Lines, Line.
 - vi. Click one of the points, move the cursor using the Touchpad and click on the second point. Press **(esc)**.
 - vii. Press **(menu)**, Measurement, Slope, **(enter)**. Click on the line. Move the cursor away from the line and press **(enter)** to place the slope on the graph page. Slope= _____
 - viii. Grab the point at (2,2) and move to (3,2). The new slope is _____

- ix. Find a point that will give a slope of zero. _____
- x. What happens when a vertical line is drawn? _____

Another Point of View

1. Press **ctrl** **doc** to insert a new page. Choose Add Geometry.

2. What appears in the upper right corner? _____

3. How can I get rid of the scale? _____

4. Press **menu**.
 - a. Which options are grey indicating they are not available?
 - i. _____
 - ii. _____

5. Create a regular pentagon.
 - a. Press **menu**, Shapes, Regular Polygon.
 - b. Click to indicate the center, again to indicate outer edge.
 - c. Swipe right or left on the Touchpad to change the number of sides until there are five.
 - d. Press **enter**, **esc**.
 - e. Press **menu**, Shapes, Circle.
 - f. Move cursor to center of pentagon and click.
 - g. Move cursor to one of the lines.
 - i. What do you observe? _____
 - h. Continue to move the cursor to one of the vertices and press **enter**.
 - i. What have you constructed? _____
 - i. What is the measure of each angle? _____
 - j. How can you verify all the sides are the same? _____

How many items were you able to Scavenge? _____