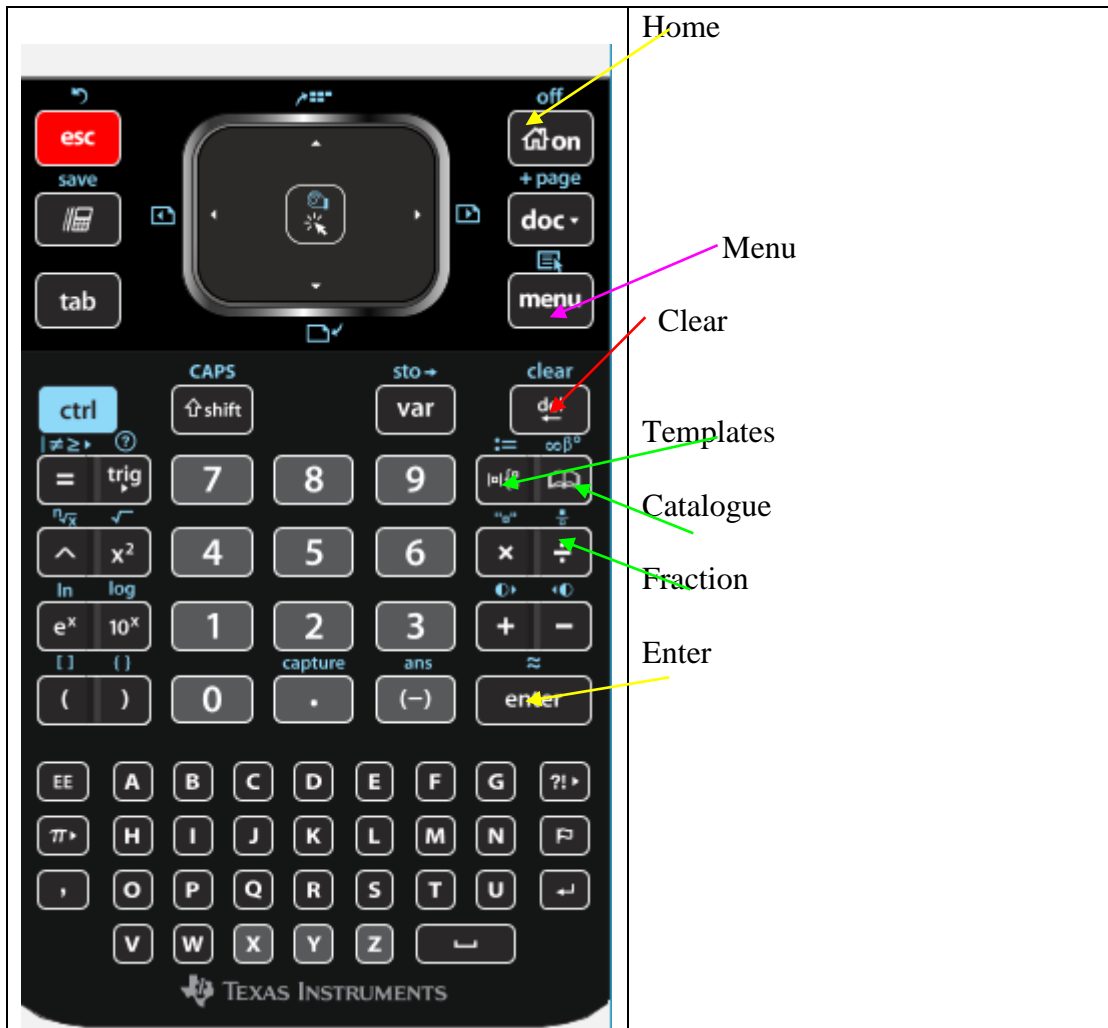
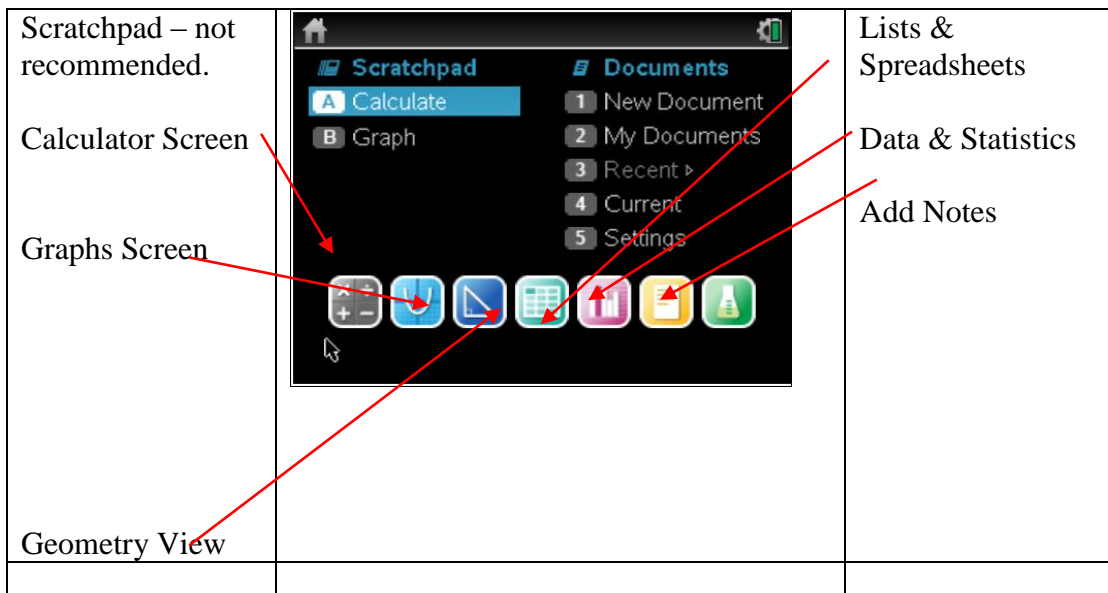


Introduction to TI Nspire CAS Calculator OS 4.0

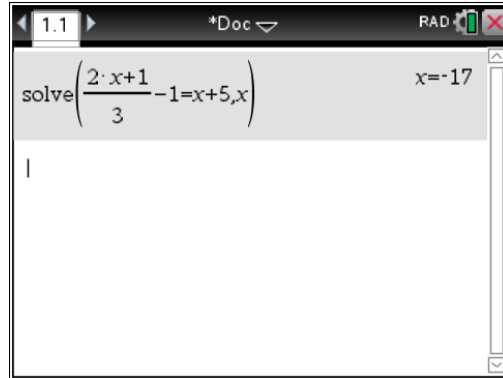
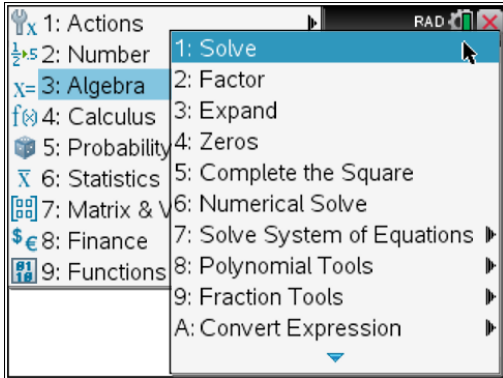


HOME SCREEN: Always use Calculator / Graph (not Scratchpad).



CALCULATOR SCREEN

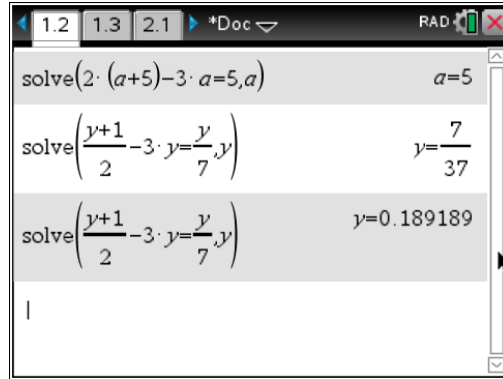
1. Solving equations Menu Algebra Solve



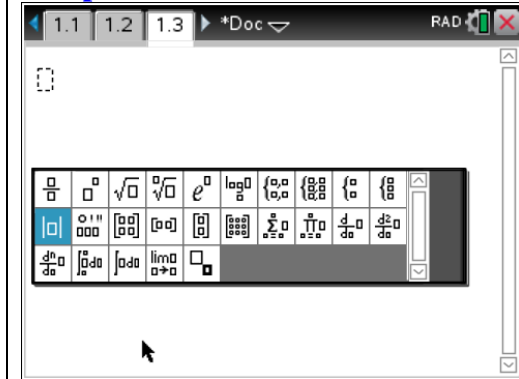
Hints: Use fraction symbol to enter an equation.

Tab will move you between the fields.

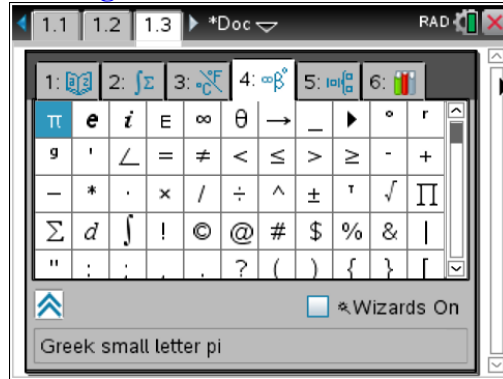
Always specify the pronumeral you are solving for after the coma. Ctrl enter for decimal value.



Templates



Catalogue



2. Solving equations by Backtracking:

Enter the equation: $\frac{x}{3} + 2x = 5$ Enter

The calculator shows the following steps:

- $\frac{x}{3} + 2 \cdot x = 5$
- $\left(\frac{x}{3} + 2 \cdot x = 5\right) \cdot 3$
- $7 \cdot x = 15$
- $\frac{7 \cdot x = 15}{7}$
- $x = \frac{15}{7}$

Times 3 Enter

Divide by 7 Enter

You do not need to retype the equation. The calculator will apply the same operation to both sides.

3. Transposing the formulas

To make a the subject in the equation $v = u + at$, enter on your calculator:

The calculator shows the following steps:

- ClearAZ
- solve($v = u + a \cdot t, a$)
- $a = \frac{-(u-v)}{t}$

NOTE: You need to have times sign between a and t!

Also, before rearranging formulas, go to Menu, Actions, Clear a-z in case there were values assigned to the pronumerals.

4. Solving inequalities.

To solve $\frac{1-2x}{3} \leq 5$ enter:

The calculator shows the following steps:

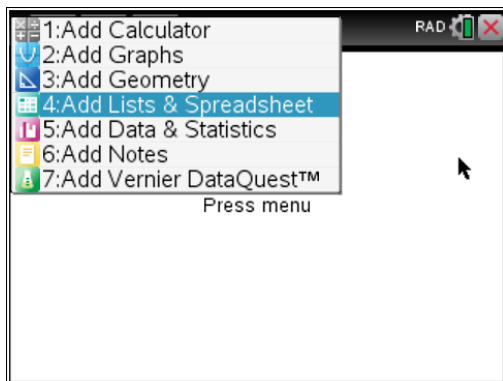
- solve($\frac{1-2 \cdot x}{3} \leq 5, x$)
- $x \geq -7$

To enter less equal, press = sign to see the box:

>	<	≠
≥	≤	

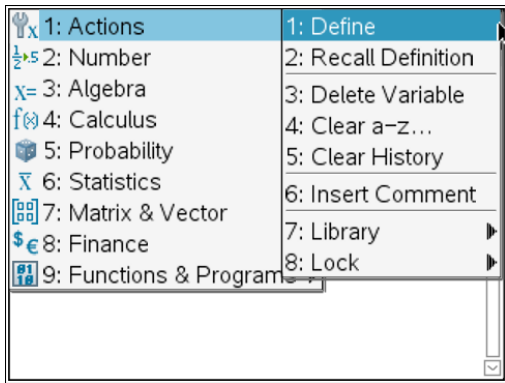
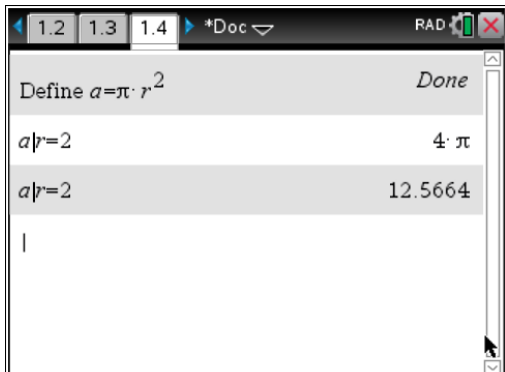
And select the appropriate sign.

Ctrl doc opens this page, which is a handy shortcut (you do not have to go back to the Home screen (with a house)).



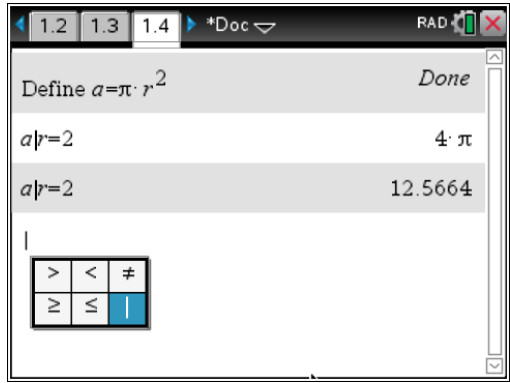
5. Define and substitution.

The area of a circle is given by $a = \pi r^2$. We will use the CAS calculator to define the formula and then find values of areas for different values of radius r:

Auto setting gives exact values (fraction, in terms of π)

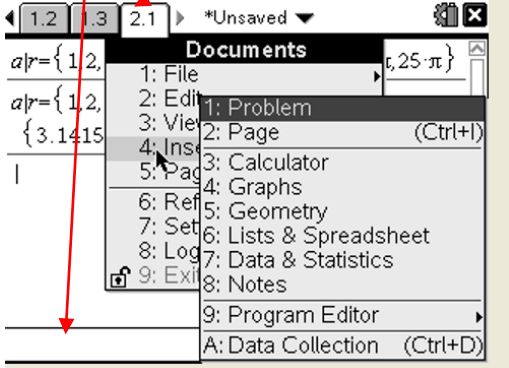
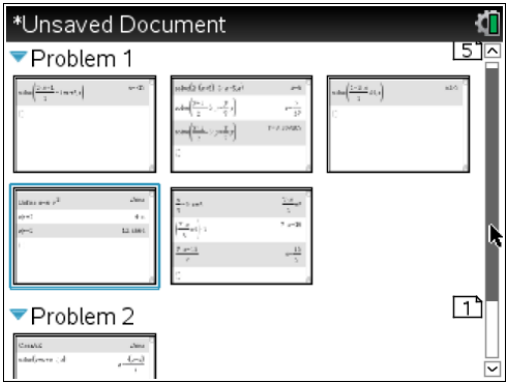
To find the value of the area when radius is 2 type a/r=2
The vertical line sign is in the box



To get a decimal value press ctrl enter.

6. Pages and problems.

The calculator allows you to add more pages or a new problem. To see the screen below, press doc.

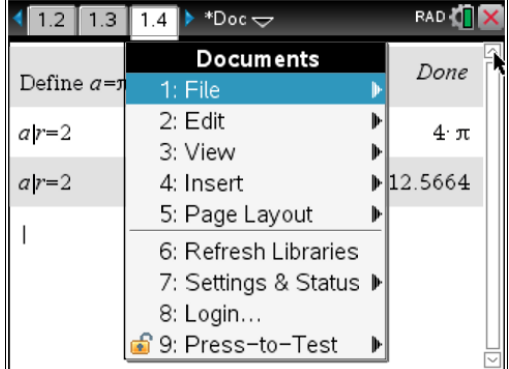
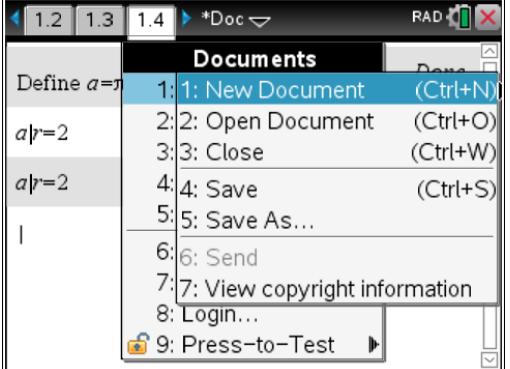
<p>Problem 1 has 3 pages, Problem 2 has 1 page.</p>  <p>Ctrl left/right arrow to move between pages and problems.</p>	<p>Press ctrl and top arrow on a rectangular pad to see what you have on your calculator in the current document.</p>  <p>Ctrl left/right arrow will move you between the screens. Enter will get you back to the highlighted screen.</p>
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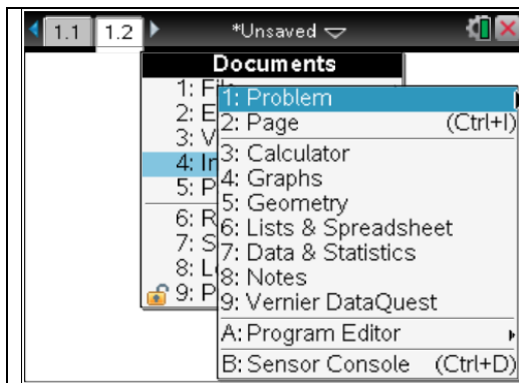
Computer shortcuts Ctrl C, Ctrl V, Ctrl Z, Ctrl S etc will work on your calculator.

When you start over next time, you are advised to open a new document. Also, there is no need to save the current document when you finished.

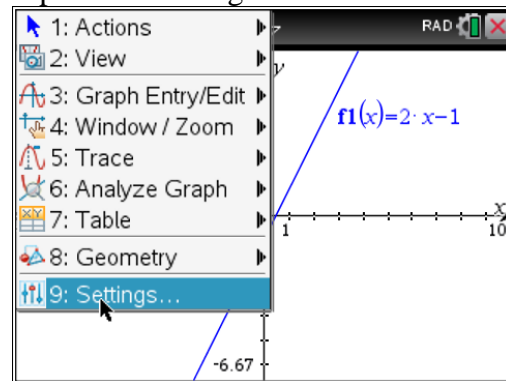
It is very common that students do not open a new document and have variables saved and lots of lines in the calculator screen and later lots of graphs in the graph screen. It becomes very messy and is not recommended.

Press doc and you will see this screen.

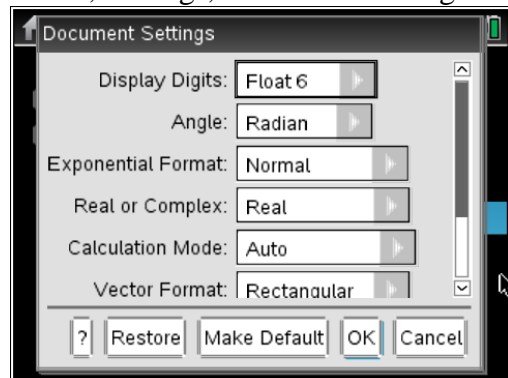
	
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Settings for Graphs and Geometry are separate to settings for a calculator.



Home, Settings, Document Settings



IMPORTANT NOTE TO STUDENTS:

Please retain your license number for Student Software. You will find it in your package when purchasing a new calculator.

You will need to take your license number to the IT Department and ask to have your TI Nspire CAS Student Software installed on your laptop.