T^3 Webinar: Back-to-School Tips and Tricks for TI-84 Plus Technology
Part II

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https://education.ti.com/en/us/professional-development/webinars/upcoming#ondemand/technology/all

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Guidebooks and Links:

TI-84 Plus CE Getting Started
https://education.ti.com/download/en/US/3BBF042421644CE2AF713484B03A8B11/AABEF068191A4208850538606111C0C1/TI84_Plus_CE_GettingStarted_EN.pdf

Full TI-84 Plus C Guidebook (TI-84 Plus, TI-84 Plus C and TI-84 Plus CE 5.0)
https://education.ti.com/download/en/US/1743A58846484D5C9C6E1525B2548EED/FE52ED11600F49ACBDEF6108BD98C99C/TI-84Plus_C_Guidebook_EN.pdf

TI-SmartView CE emulator - Free 90 day Trial or Free Update

Emulator software – screen capture and more!
https://education.ti.com/en/us/products/computer_software/ti-smartview-software/ti-smartview-ce-emulator-software-for-the-ti-84-plus-family/tabs/overview

TI Connect CE - Free Download

Manage calculator files, screen capture & TI-Basic program editor
https://education.ti.com/en/us/products/computer_software/connectivity-software/ti-connect-ce-software/tabs/overview

Editing Tips! Bonus not covered in the Webinar!

1) [2nd] [entry]
   - Pastes previous entry – step back through entries
   - Overwrites entire entry line.
   - Also use this to copy from Home Screen to Y=!
     - Enter an expression in X on Home Screen.
     - Press [enter].
     - Expression will evaluate to whatever is stored in X.
     - [Y=] and place cursor on a YVar, say Y1.
     - [2nd][entry] will paste the expression.

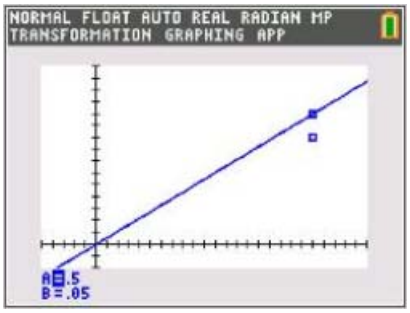
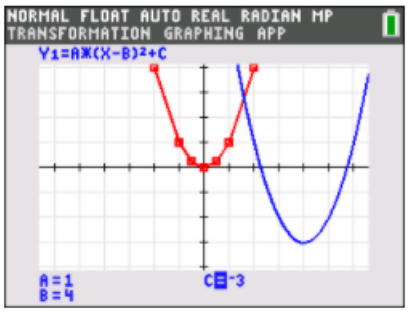
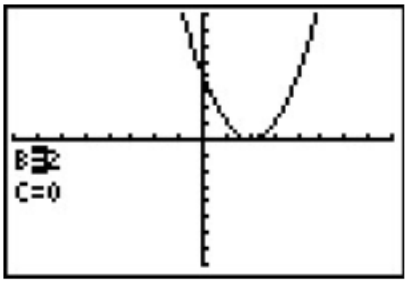
2) Copy/Paste from History
   - Use the arrow key to highlight an entry (input) or result (answer) up in home screen history.
     i. Note: List and Matrix answers will not paste from history.
   - Press [enter] and the entry or answer will paste to the cursor location on the entry line.

3) Delete a History pair?
   - Arrow to any entry or answer in a history pair. Press [del] to delete the history pair.

4) Experiment with [2nd] [rcl].
   - [2nd] [rcl] [2nd] [ans] will paste the value of ans (answer) instead of the variable "ans."

5) [2nd] [>] and [2nd] [<] on an expression will jump the cursor to the end or beginning of the expression for easy editing!

And more on next page!

Reminders from the Webinar!	Examples Used
Transformation Graphing App **84 Activity Central** **Boats in Motion (Linear Equations)** https://education.ti.com/en/activity/detail?id=576DE1E9D76F4374B710200C4100E6B6&ref=%2Fen%2Factivity%2Fsearch%2Fadvanced **Graphing Quadratic Functions** https://education.ti.com/en/84activitycentral/us/detail?id=26347906DEF24F8F97F089F6EFC061A1&t=D8B8C220FB134AD79C21D8694DBC2704 **Just Move It!** https://education.ti.com/en/84activitycentral/us/detail?id=33B4913EEA1C4AF18E32D3B8DFD24181&t=3A71F0C480794A6189EBEA25F3050729 **Transformation Graphing App Tips** 1) Use A, B, C and/or D in the equation you wish to transform. 2) [window] [up arrow] to the SETTINGS menu a. You can set up animations from this screen. 3) [format] has the TrailOn TrailOff options 4) Quit the App 5) On TI-84 Plus, [APPS] and rerun Transformation Graphing App. Select option to Quit App. 6) On TI-84 Plus C and TI-84 Plus CE, [Y=] and arrow up and to the right to QUIT-APP (next to Plot3). Transformation Graphing App Guidebook – This guidebook will see an update in the future but there is great information on using the App here! https://education.ti.com/en/guidebook/details/en/312402C82DB946D6A600570CC371FA99/83transformationgraphing TI-84 Plus CE will have quick access to these setups and some enhanced features coming in the Fall. Watch for an update.	  

Reminders from the Webinar!	Examples Used

Graphing Piecewise Functions

84 Activity Central
Which Garage is Better?

https://education.ti.com/en/84activitycentral/us/detail?id=DB473E4EF7324E8683A33E39120D5098&t=3A71F0C480794A6189EBEA25F3050729

Overview from Webinar:

Use the [2nd] [test] menu for relation TEST. Results will true (1) or false (0) when testing a relation.

Use the true (1) and false (0) results along with the fact that the Y= grapher will not graph an undefined value (i.e. division by 0) to simulate a piecewise graph.

In the screen, Y1=10/(X≤1)

What does this mean?
As the grapher graphs from Xmin to Xmax set up in [window], there will be a test of each point in the graphing domain.

Examples of how Y1 will graph. Let's look at a few points.

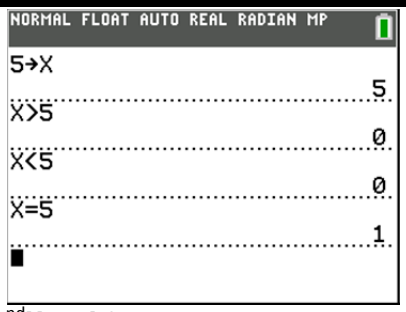
When X=0, X≤1 is true (1).
Y1(0)=10/1. The Y value will be 10.
In table, the result is 10.

And say when X=5, X≤1 is false (0).
No point will graph. Y1(5)=10/0 which is undefined.
In table, the result will be given as ERROR.

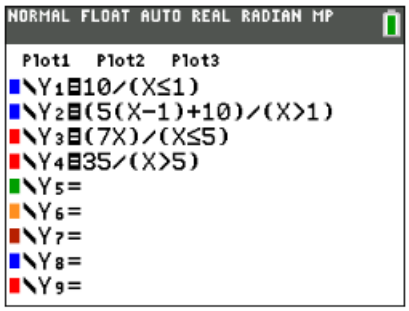
So a textbook piecewise graph can be graphed by using the relation test of the condition along the X graphing domain (in [window]).

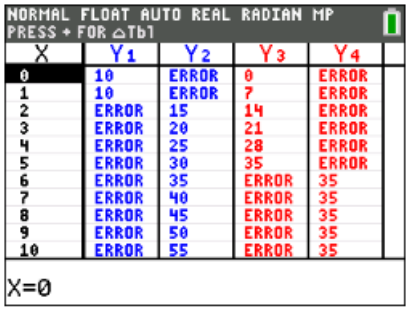
Watch for an enhanced textbook entry of piecewise functions for the TI-84 Plus CE coming in Fall.

See full OS guidebook link on the first page of this handout.



[2nd][test] for the relation TEST menu



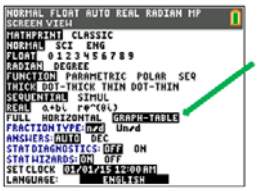


BONUS TIPS AND FEATURES!
Some of my favorite things.

Bonus!

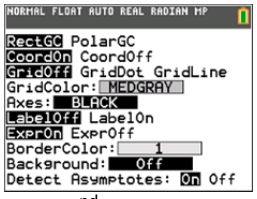
Graph-Table mode setting – the power of analytic, numeric and graph!

- Setting Graph-Table mode



[mode]

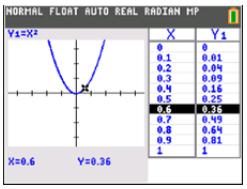
- [2nd] Format: Set GridLine, colors, and even Background Image (5 Image Vars are pre-loaded).



[2nd] Format

- Zoom: ZoomDec was used. Each Zoom is an automatic setting for Window.

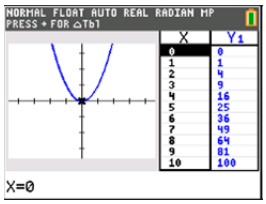
- Trace in Graph – same as Full screen graph.



[graph] gives graph focus

- Smart Trace – While tracing, enter a value to jump to that point!

- Trace in Table – [2nd] [table] changes focus to the right hand of the screen. Use up and down arrows to trace the Table values on the Graph!



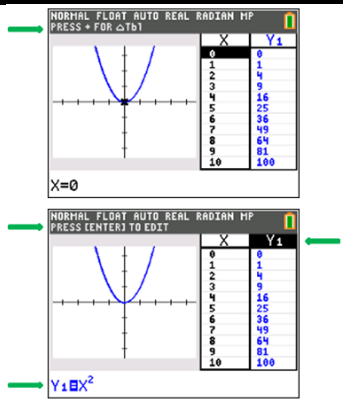
[2nd][table] gives table tracing

Bonus!

Graph-Table continued:

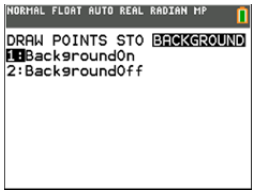
- Edit ΔTbl (delta Table) in view – look at Context Help in the Status Bar!

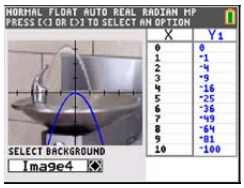
- Edit function from Table in view – look at Context Help!



Edit deltaTbl and the function – look at the Context Help line for reminders!

-
  - BackgroundOn from Graph screen
  - From [graph],press [2nd] [draw] BACKGROUND menu to find interactive graphing BackgroundOn!
  - Use arrows to find your Image Var and press [enter] to select as the background image! Drinking fountain is a pre-loaded Image Var.





Also See:

- QuickPlot&FitEq Activity posted with the Webinar materials. "At the Drinking Fountain" student and teacher notes.
- "Building a Garden Fence" in 84 Central https://education.ti.com/en/84activitycentral/us/detail?id=52C3DDA4B45547EF86EAA58B58201E62&t=B850B03EE2054CE4A4B55CCD8CEA51E6

Don't forget to check out the Manual-Line Fit feature in [math] CALC arrow up to the bottom of the menu. From the graph screen, this is a manual line fit!

See full OS guidebook link on the first page of this handout.

Bonus!

Interactive Draw – selected features
See OS guidebook link on the first page of this document.

This rich menu extends the drawing on the graph screen. These feature draw over the graphs and are <u>cleared using the ClrDraw command.</u>

Try these features…and more! (Change color in STYLE.)

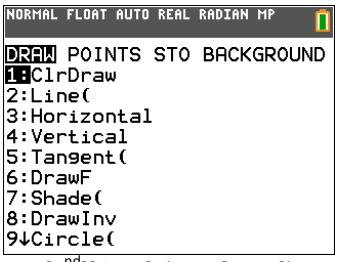
- Horizontal and Vertical lines
- Tangent(*(Result given on graph border.)*

Steps:

- Press [graph] to be on the graph screen.
  - *For Tangent(, have a function loaded in [Y=].*
- Press [2nd][draw] to access the interactive feature.
  - *If not on graph, the TI-Basic programming commands will paste.*
- Press STYLE to change color and line style.
- Use arrows and [enter] to "set" the draw feature.
- Use ClrDraw to "erase" these draw features.

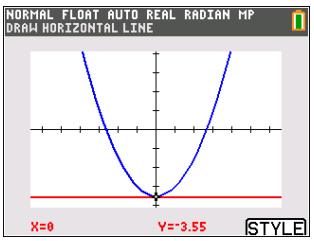
See full OS guidebook link on the first page of this handout.

Draw Menu Features

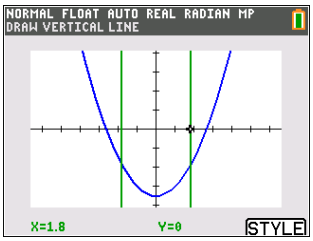


[2nd][draw] (over [prgm])

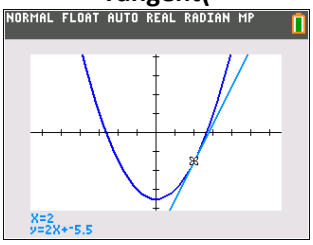
Horizontal



Vertical



Tangent(



Bonus!

Inequality Graphing App

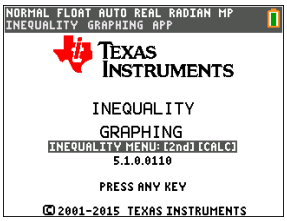
Inequality Graphing CE App for the TI-84 Plus CE is pre-loaded and contains the same features as on the TI-8x Family with ease of use features.

Where to find familiar features. (Read the second context help line up in the status bar for help or information.)

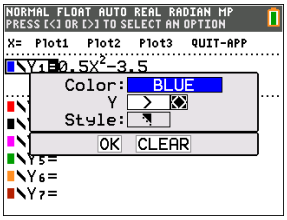
- [Y=]
  - Use left arrow to move cursor over the color/line style area, press [enter] and use the dialog box which now includes relation settings.
  - X= editor – highlight X= (top line) and [enter]
  - QUIT-APP – highlight this to quit the App.
  - On TI-84 Plus, [APPS] and rerun Inequality Graphing App. Select option to Quit App.

- [graph]
  - Find all Inequality Graphing features as on TI-8x Family, now located in [2nd] [calc] INEQUALITY menu.

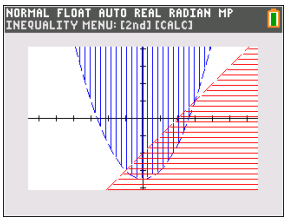
Inequality Graphing App Guidebook – This guidebook will see an update in the future but there is great information on using the App here!
https://education.ti.com/en/guidebook/details/en/80A836882FE34679B9D03F76C1CBAFF1/83inequalitygraphing



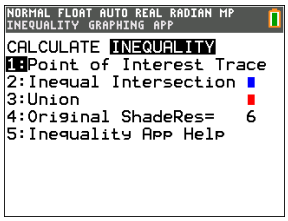
Splash screen with reminder of [2nd][CALC] INEQUALITY menu



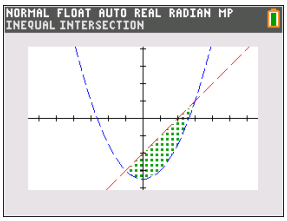
[Y=] [<] [enter] to set color/line/relation



Read second line in status bar for reminders & help.



Inequality features in [2nd][CALC][>] INEQUALITY menu



Example of menu item 2:Inequal Intersection