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1. Installation

Graph 3D v4.1 is a full-featured 3D graphing utility for the TI-84 Plus C Silver Edition graphing calculator. It is **not** for the earlier TI-83 Plus and TI-84 Plus calculators; for 3D graphing on those calculators, try <u>Graph3D 4.0</u>. Graph3D v4.1 can simultaneously graph up to six 3D equations, rotate, and trace, the resultant graphs. It contains powerful tools to modify and edit the resultant graphs, adjust the window, zoom, and rendering options. To install Graph 3D v4.1 on your calculator, simply send Graph3D.8xp to your calculator using your GraphLink-compatible software. Once on the calculator, run prgmGRAPH3D. You will see the welcome screen; press [ENTER] to continue, then use the program normally.

2. Using Graph 3D v4.1

To run Graph 3D from the TI-OS (for most users), simply press [PRGM], select GRAPH3D with the arrows, and press [ENTER] twice. You can also run Graph 3D v4.1 using Doors CS 7. When you run Graph 3D, you will start at the equation entry screen, accessible from anywhere within Graph 3D with the [Y=] button. The functions in Graph 3D correspond exactly to the keys in the regular graph tool. [WINDOW] lets you edit the windows settings, [ZOOM] lets you zoom the current window, [2nd][ZOOM] edits the graph format, [TRACE] lets you graph and trace the current graphs, and [GRAPH] will render the current 3d equations with your window settings. Press [2nd][MODE] at any time to quit Graph 3D.

3. Features

Graph 3D contains a variety of features to help you use and manipulate your 3D graphs. They include:

• Equation Editor:

Enter up to 6 equations in the form Z=<equation> in terms of X and Y. Press [ENTER] to enter an equation, [CLEAR] to delete an equation, and any standard key command to go to that feature.



• Window:

Edit the window settings. Xmin, Xmax, Ymin, and Ymax control the viewable area of the window; Xpct and Ypct control the polygon count in the X and Y directions for rendering (they must be integers greater than 1). Note that the higher the polygon count, the more memory is required to render the graph.



• Zoom:

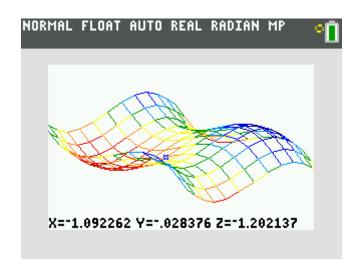
Zoom into a variety of settings for the graphs. For ZBox, you must select diagonal corners of the new window, then press [ENTER] to save the setting. After any zoom, the current graph will be displayed.

• Format:

Edit whether the axes are displayed in the graph and the coordinates are displayed during tracing.

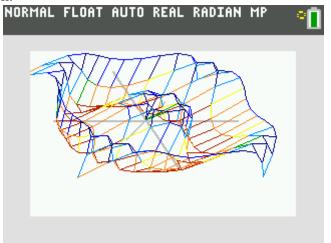
• Trace:

Display the current graphs and trace over it in the X and Z directions. Press [+] and [-] to move between graphs.



• Graph:

Display the current graphs. Use the arrows to rotate the graph.



4. More Info

For more information, check out Cemetech at <u>cemetech.net</u>. You can discuss this and other Cemetech projects on the <u>Cemetech Forum</u>.