

Asymptotes on the TI-84+ Color

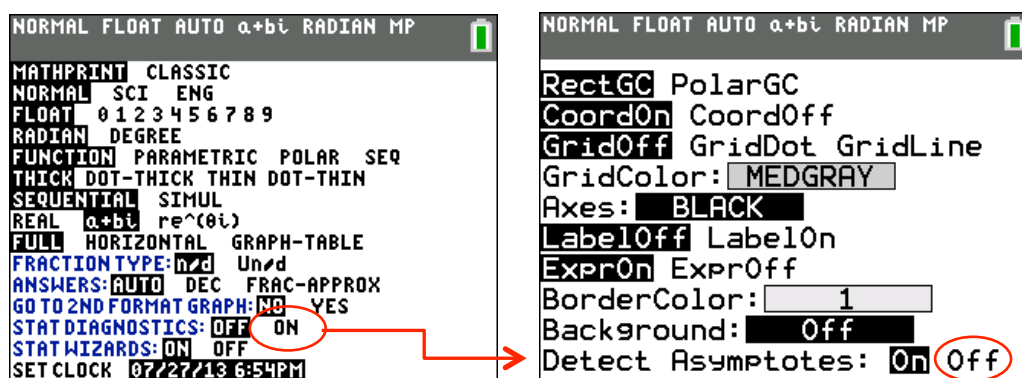
The plotting speed of the TI-84 Plus Color is affected by a setting in the MODE menu. This document will describe how to:

- 1) Turn this mode on and off
- 2) Why this feature exists.

How to turn off the detect asymptotes mode

Turning off the detect feature will speed the plotting.

Got to the mode menu using the **MODE** key and select **Go to 2ND Format Graph**.



Find **Detect Asymptotes: On Off** at the bottom of the screen and change it to **off**.

Why does this feature exist? Why not keep it off all the time?

When plotting a rational expression, the function may have regions where the graph goes to positive or negative infinity. The TI-84 Plus Color (and older non-color models) graph these regions poorly (*see below, left*) and give you the wrong impression a function may be continuous. When the **Detect** feature is turned on, the calculator will render a plotting of the graph more accurately (*below right*), but at a cost of speed. If you are plotting equations that are not rational, you may leave Detect **Off**.

