ii. Bogus asymptotes

Look at the graph of $y = 1/(x-2)$ using the ZSTD range settings (on the GRAPH/ZOOM menu). It looks like the calculator is drawing the vertical asymptote at $x=2$. Now change the range settings to ZDECM; no asymptote. In the default mode, the calculator plots a point at each pixel and connects the points with lines. In the first case, there are no pixels at $x=2$ and the calculator tries to draw a line between the two points just to the left and right of $x=2$. In the second case, there are pixels on the line $x=2$.

For this example, the "asymptote" looks all right but sometimes it can look pretty ragged. Try $y = \tan x$ on the ZOOM/STD screen. If you do not want the asymptotes, choose a range which has pixels on the asymptotes (see Section 3) or change to DrawDot mode (GRAPH/FORMAT/DrawDot). In this mode, the calculator doesn't connect points with lines.