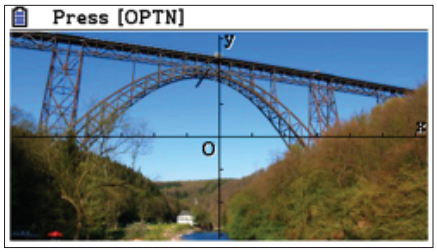
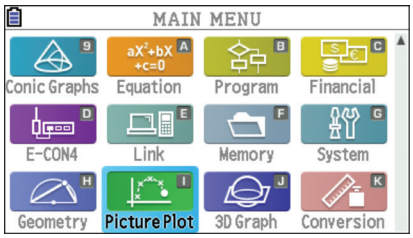
PICTURE PLOT

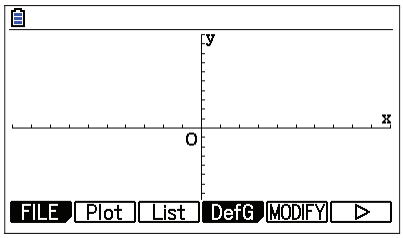
As an alternate to Modify, the PRIZM™ *fx*-CG50 allows you to plot points on a image and use regression to find a model.

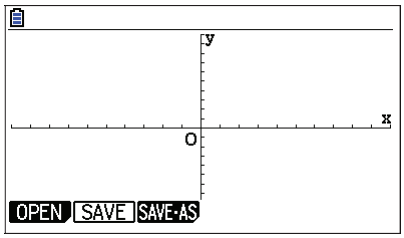
1. What is an equation for a line in the image?



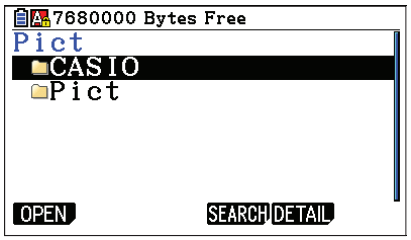
From the Main Menu, press ((I). To open the image, press OPTN F1 (FILE) F1 (OPEN).

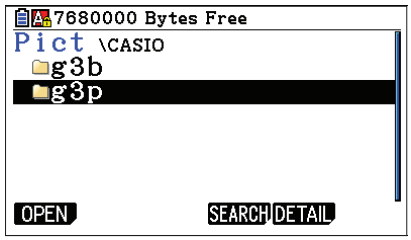


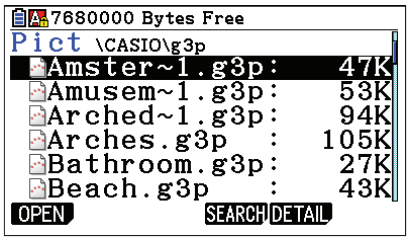




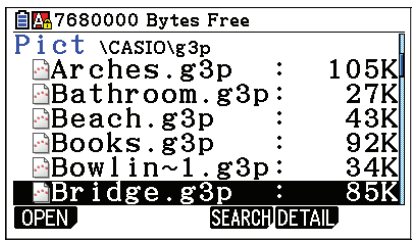
Highlight the CASIO folder and press F1 (OPEN). Scroll down to the **g3p** folder and press F1 (OPEN).

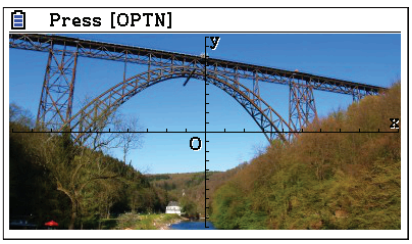


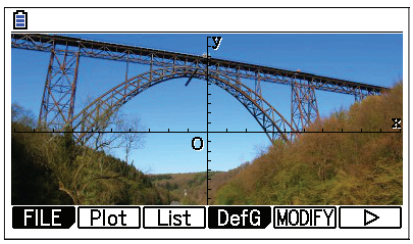




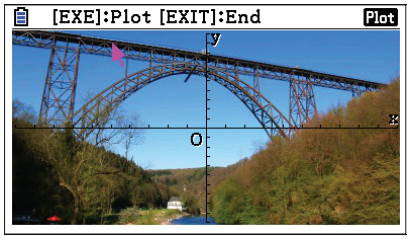
Scroll down to **Bridge.g3p** and press F1 (OPEN). To plot points, press OPTN F2 (Plot).

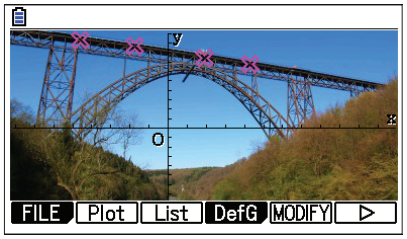


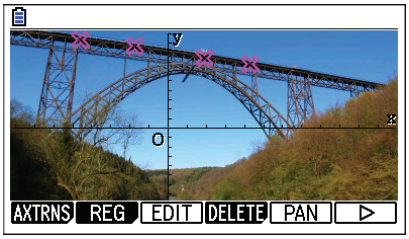




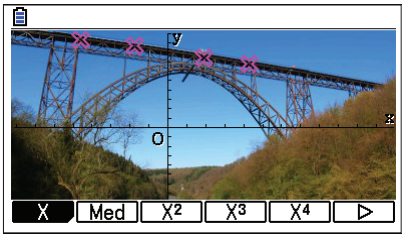
Use the direction wheel to move the arrow to a point on the line. Press [EXE] to mark the point. Continue to mark several additional points. When done, press [EXIT]. To perform a regression, press [F6] (▷) [F2] (REG).

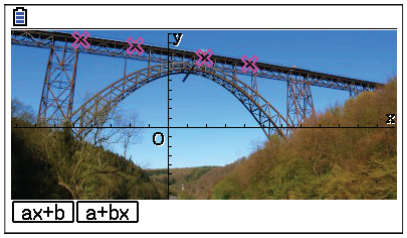


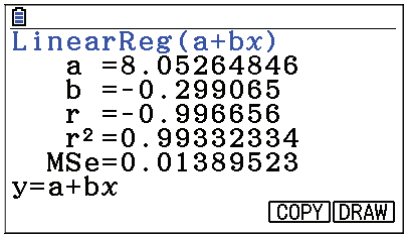




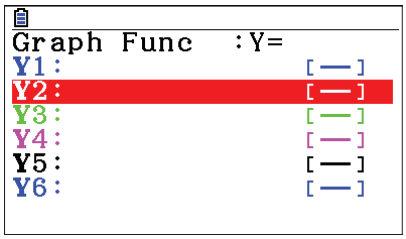
For linear regression, press [F1] (X) and select either form. Here, [F2] (a+bx) is used.

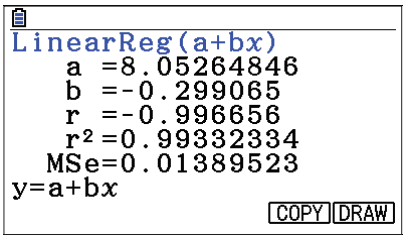


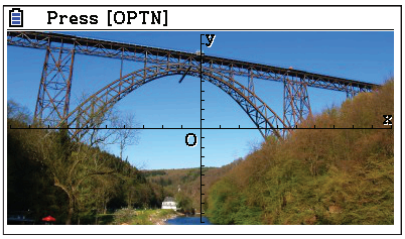




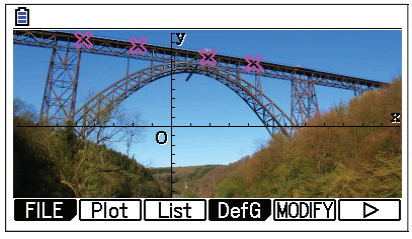
To save the result, press [F5] (COPY). The display is improved if the graph is not blue, so scroll to **Y2** and press [EXE]. Press (DRAW) to view the equation of the line. The graph is drawn but as a thin blue line.

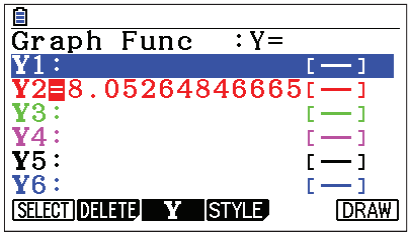


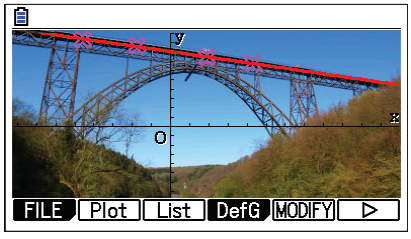




To draw the graph that was saved, press [OPTN] [F4] (DefG) [F6] (DRAW).







In a similar manner, a quadratic model can be used for another portion of the bridge.