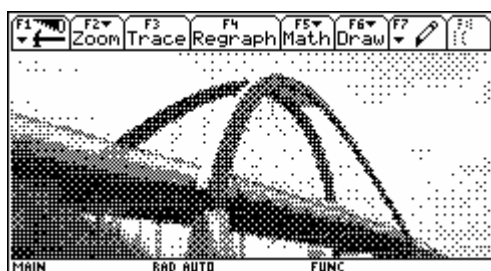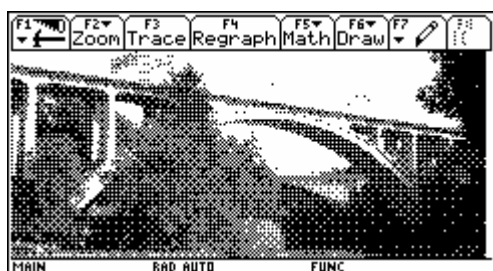# Two Bridges – Follow the Ideas of the Architects
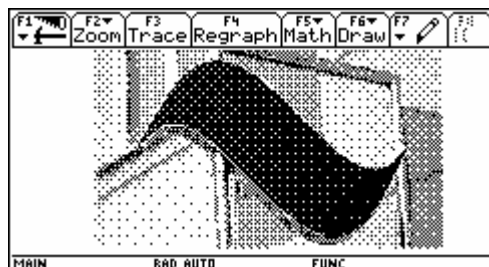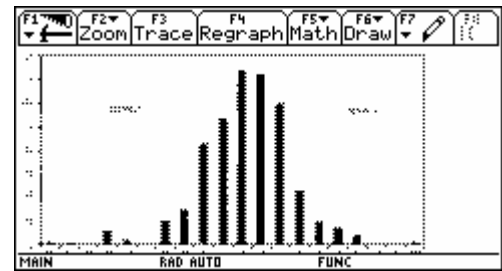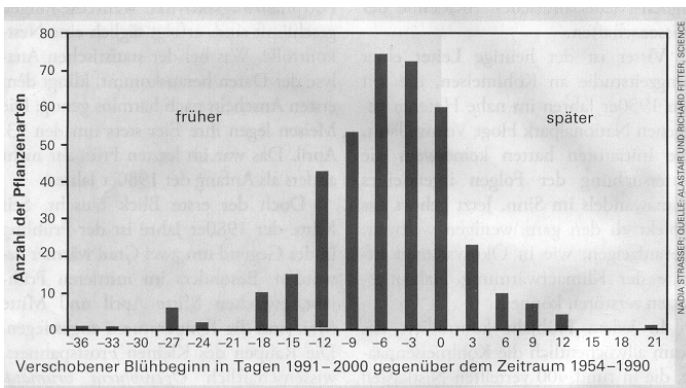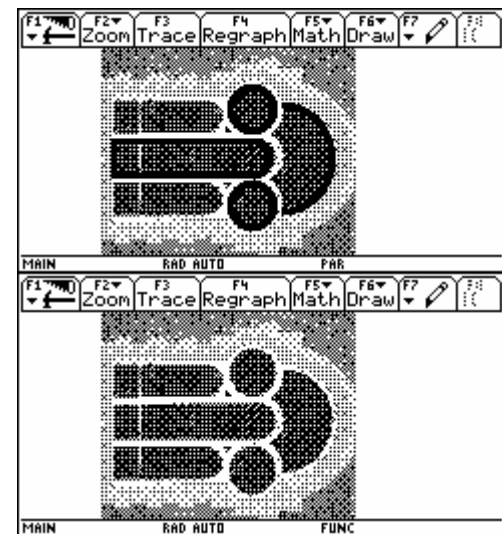








# Logo of an Austrian Bank House BA-CA





We will together bring this logo on the V200-Screen and model the figure performing the following steps:

♦ Load any suitable picture into any graphic program (Paint Shop Pro, Photo Shop,
♦ Convert to grey scale and adjust brightness and contrast
♦ Resize to the measures of the graph screen (approx 8 cm by 3.5 cm) and save as bmp-file
♦ Load this graphic- file into TI-Connect (save as the respective TI-picture file)
♦ Transfer to the TI-device

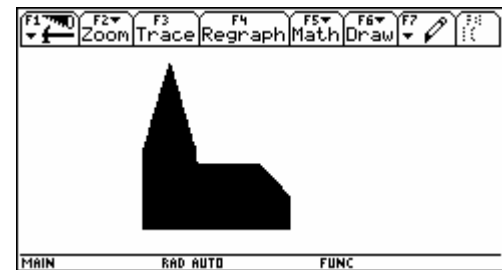# From Scientific American – Delayed Start of Blooming



# Let´s make a trip to …. ?



# A Traffic Sign along the Road



hl. Messen

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## Striking Backgrounds – Modelling with Functions

### Tania Koller, Vienna

Derive 6 offers the possibility to load pictures in the background of the 2D- and 3D- Plot Windows. I took some pictures in Switzerland with some of the nice bridges in Bern. The students should find out a function to describe the form of the arc.

This is wonderful, but I have several classes working with the Voyage 200 and I wanted to present the same task to them.
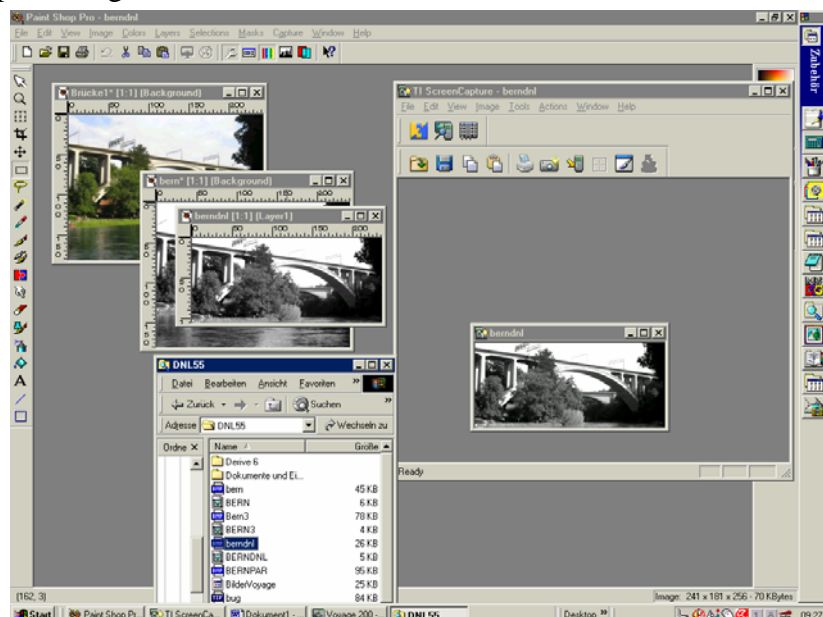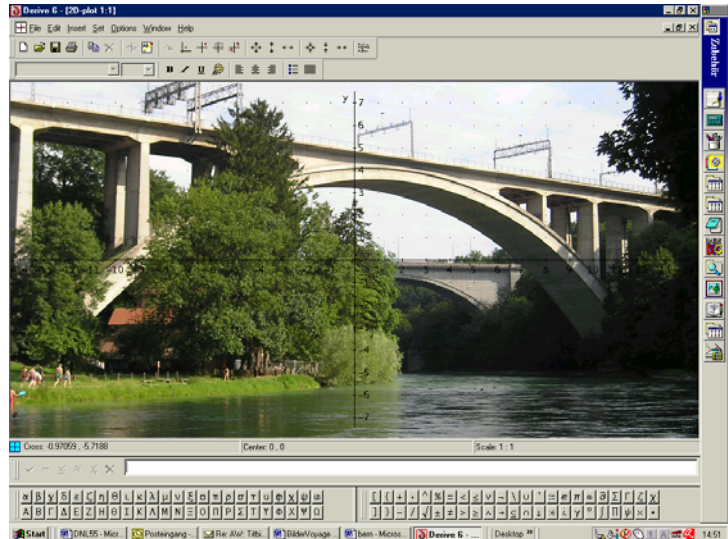TI-Connect makes this possible. I found a respective article in the TI-News[1] and then I tried.
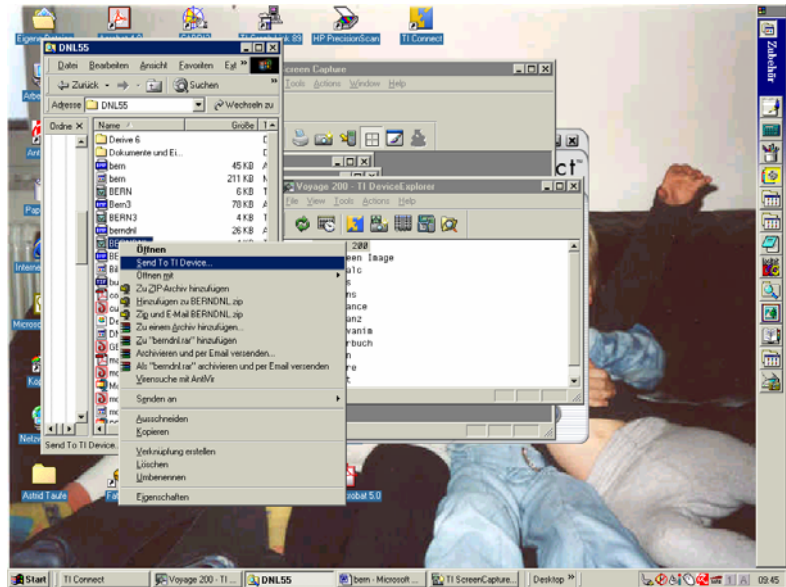This is my recipe:



1.　　Convert your picture into the *.bmp-format.
2.　　I work with Microsoft Office Picture Manager (any other Graphics Program will do!)
3.　　Edit picture
>　　Color > Saturation –100, Contrast -19
>　　Resize in a ratio 239 × 104 pixel for Voyage200 (159 × 77 for TI-89)
>　　I took 1024:446, I resized to 24% of original measures
4.　　Start TI Connect
5.　　Open TI Screen Capture → get Screen, click on the file and drag it using the left mouse button into the TI Screen Capture window, then save as *.v2i for Voyage 200 or *.9xi for den TI92+ or *.89i for the TI-89 family.
6.　　Activate *.v2i in Explorer, right mouse button → Send to TI Device

By inserting Tania´s contribution I could easily to follow her clear instructions (using Paint Shop Pro as Graphics Program). I would like to illustrate the process by presentig some screen shots.
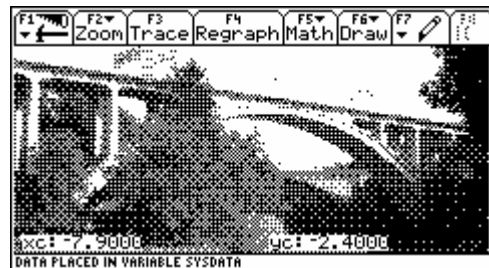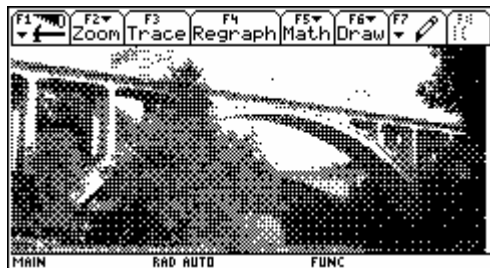
You can see the original picture and then the resized one (I converted into a gray scale graphic). Now we are ready for Screen Capture:

I saved the picture and sent it to the TI. First to the V 200 and then I repeated the process for TI-89.





These are the results: The loaded bridge on the V200-screen. I copied some coordinates of the arch into the sysdata - data sheet and performed a quadratic regression – according to Tania´s advice. The last screen shots show is Tania´s pictures of the Aaare River Bridgeon my TI-89 and on my TI-83+









Voyage 200 / TI-92                                    TI-89                    TI-84

The same can be done with Derive 6 and offers a rich variety of problems for our students. I would be happy if you could provide other exciting background pictures which provoke thinking in functions, Tania

[1] M.Falb, Wie die Bilder auf den Taschencomputer kommen, TI-Nachrichten 1/04