Anne M Burns* (aburns@liu.edu), Department of Mathematics, Long Island University, C.W. Post Campus, Brookville, NY 11548. From Sierpinski Triangle to Fractal Flowers. Preliminary report.

Starting with a simple iterated function system whose limit set is the Sierpinski Triangle, we progress in stages to a parameterized IFS with elaborate flowerlike attractors. We describe how to color the resulting fractals to obtain attractive computer art. The end result is a computer program where parameters can be entered; by changing a few parameters the attractor can range from Sierpinski carpets to fractal flowers. (Received September 01, 2006)