MAT 331, Fall 1999

Project 3: Fractals

Due Tuesday, December 14

In this project, you are asked to define a fractal of your choice whose box-counting dimension is $\log 5/\log 4$. Describe clearly how you construct such a set and **prove** that its dimension is the requested number. Also, plot the first 6 Lindenmeyer approximating curves to the fractal.

As always, pay attention to clarity of exposition; and describe what you do at each step from a mathematical viewpoint, not as a commentary on how to use Maple. In your proof you can use the results we proved in class.

Bonus: Do the same thing for a fractal of box dimension $\log 7/\log 4$.