BIFURCATION

CATEGORY : Chaos and fractals

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APPLICATION:

This application illustrates the iterative solution to the logistic equation
$x = rx (1-x)$.

The self- similarity and deeper structure is demonstrated by using the mouse to zoom in on the drawing to get more detail.   Click the mouse at the upper left of the rectangle which will give the dimensions of the next drawing.   Drag to the lower left corner of the desired rectangle and release the button.   The new dimensions will appear in the proper fields.   Push the draw button to draw the next diagram.   If it is too light, increase the number of iterations and draw again.

USE: Mathematics classes.

DEVELOPMENT: NeXTSTEP 2.0