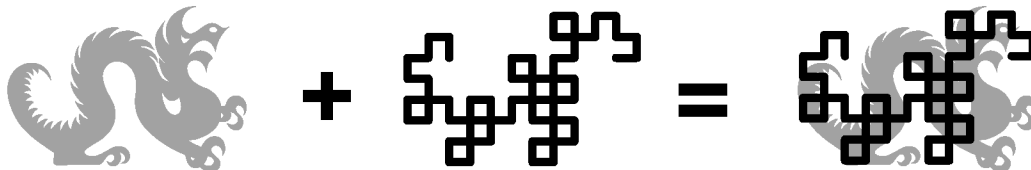




# Folding the Forum Logo

How to make the Dragon Curve, or the “Jurassic Park Fractal”, in

Annie Fetter had a brilliant idea for the Math Forum’s new logo. She combined the Drexel University mascot (Mario The Dragon) and mathematics in the form of a dragon fractal superimposed on the mythical dragon creature.



In our Ask Dr. Math archive, Doctor Mitteldorf explains:

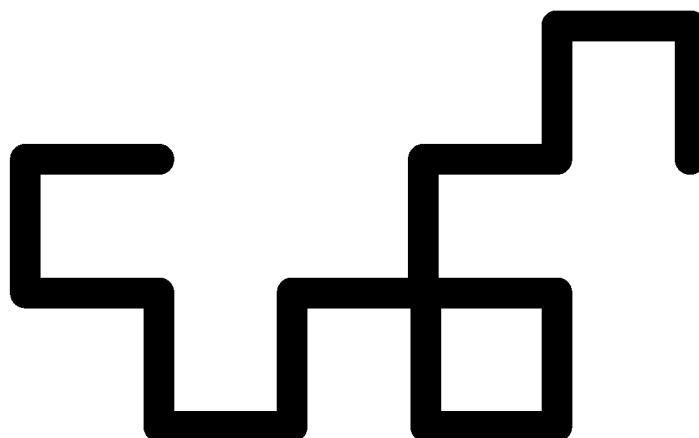
*A fractal is a shape with a lot of detail to it. “A lot” is actually an understatement. The more closely you look at a fractal, the more the lines appear jagged and convoluted. This is the basic property that distinguishes a fractal from any other curve you might draw. If you draw an ordinary curve and look at the curve with a magnifying glass (figuratively) then any part of the curve will look smoother and smoother the closer you look, until you really can’t tell it from a straight line. But not a fractal. The closer you look, the more detail shows up.*

Try Cynthia Lanus’s directions:

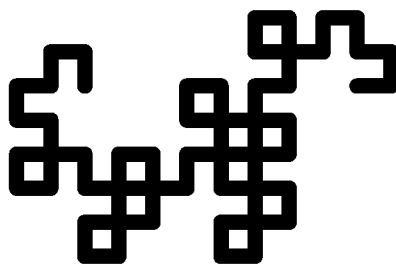
“Start with a narrow strip of paper, let’s say approximately 1” by 11”. Construction paper works really well because it has a little more stiffness. A dragon curve is a recursive nonintersecting curve whose name derives from its resemblance to a certain mythical creature.

“Take the strip in both hands, fold the paper over left onto right, and crease. Now fold it again in the same way, left to right, and crease, and again, left onto right and crease, and again left onto right and crease. You have folded it four times in all, right? Before you open the paper out, can you imagine what it will look like unfolded? Let’s unfold and see. Now you may be saying, this is just a mess of folded paper. How can this be a fractal? Well, we have to put some order to it.

“Lay the paper on its edge. Crease all the folds as right angles. Then rotate it until it matches up with the figure below. Be sure to find the closed-up square. See? You did it! It’s the same shape!



You'll need to fold the paper two more times to get our dragon!



For more information and activities, visit:

Fractals: A Fractals Unit for Elementary and Middle School Students That Adults Are Free to Enjoy  
by Cynthia Lanius

<http://math.rice.edu/~lanius/frac/>

Fractals

by Suzanne Alejandre

<http://mathforum.org/alejandre/workshops/fractal/fractal3.html>

Studying Mandelbrot Fractals

by Suzanne Alejandre

<http://mathforum.org/alejandre/applet.mandelbrot.html>

