

L-Systems

Converting a Common Notation to JFLAP

Turtle graphics mix the graphics with the production rules. Below we outline a simple way to convert these to JFLAP. One source of Lsystems is <http://www.kevs3d.co.uk/dev/lsystems/>

The twin dragon is expressed in turtle graphics as

AXIOM: FX

Rule 1: X = X+YF+

Rule 2: Y = -FX-Y

F means go forward and draw.

- + means turn right 90
- - means turn left 90

So we can add a rule

Rule 3: F = g

and set the angle parameter to 90

make sure to include spaces after each symbol. Things get a little tricky when F is used both as a symbol in the substitution and the command to draw. As we see in the more advanced example. Alternatively we can simply replace the occurrences of the F with a g (since g is a terminal symbol).