Project 5: Complex Mappings and Spirograph Patterns

Spirograph pictures can be made with complex functions. A reference to how to do this using *Mathematica* can be found at

http://reference.wolfram.com/legacy/v5_2/Demos/Notebooks/Spirograph.html

Explain how this works and how one can reproduce the situation for just two circles with suitable complex functions.

Write some *Mathematica* code to produce some æsthetically pleasing spirograph pictures. A spiral element often makes for nicer curves. Try doing similar things with other complex functions such as iterated exponential or trigonometric functions.