

A bit more Complex Iteration

Worksheet to accompany

David Feldman, *Chaos and Fractals: An Elementary Introduction*,
Oxford University Press, 2012

Consider the function $f(z) = z^2 + c$.

For each c value below, calculate the first four orbits of the initial condition $z_0 = 0$. Use wolframalpha.com or a calculator that can handle imaginary numbers.

1. $c = -0.2 + 0.2i$
2. $c = -1.0 + 0.1i$
3. $c = -0.1 + 0.75i$

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