

## Chapter 25: Julia Sets

Worksheet to accompany

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

Consider the function  $f(z) = z^2 - 1$ .

1. I will give you an initial condition  $z_0$ .
2. Using a complex calculator, calculate the first few iterates of  $z_0$ .
3. If the iterates blow up (tend toward infinity), write your initial condition on a yellow post-it. If your iterates do not blow up, write your initial condition on a non-yellow post-it.
4. Stick your post-it with the initial condition on the appropriate spot on the complex plane on the blackboard.
5. Go to step one.

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