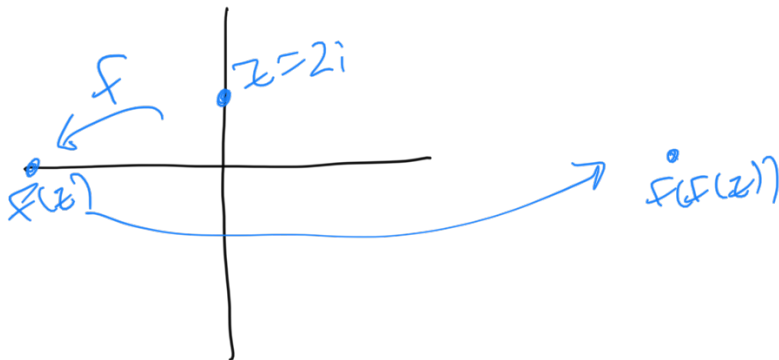


Lecture 2: Julia Sets

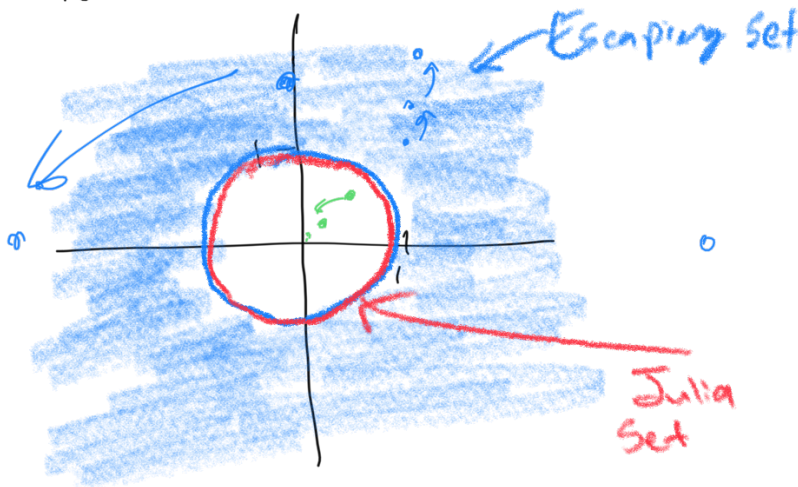
F polynomial
 eg. $F(z) = z^2$ complex numbers
 (Warning: Would need 4 dimensions to draw graph of F)



Escaping set: $\{z \in \mathbb{C} : |F^n(z)| \rightarrow \infty \text{ as } n \rightarrow \infty\}$

Julia Set: boundary of escaping set
 $J(F)$

For $F(z) = z^2$



For $F(z) = z^2 + c$
 $c \neq 0$, much harder to understand what happens when iterate

$f(z) = z^3$

