

XII. Conformal Maps to Jordan Regions

1. Badly Behaved Jordan Curves
2. Janiszewski's Lemma
3. Proof of JCT
4. Caratheodory's Theorem
5. Exercises

XIII. Dirichlet Problem

1. Perron Process
2. Local Barriers
3. Another Proof of the Riemann Mapping Theorem
4. Exercises

XIV. Riemann Surfaces

1. Analytic Continuation
2. Monodromy
3. Riemann Surface Definition
4. Simply Connected Covering Surface
5. Deck Transformations
6. Exercises

XV. The Uniformization Theorem

1. Lindelöf's Maximum Principle
2. Green's Function
3. Dipole Green's Function
4. Simply Connected with Green
5. Simply Connected without Green
6. Classification of All Riemann Surfaces
7. Exercises

XVI. Elliptic Functions

- 1.

XVII. Fuchsian Groups

1. Convergence Type and Blaschke Products

2. Hyperbolic Geometry on \mathbb{D}

XVIII. Six Definitions of Analyticity (will go between VI and VII)

1. Morera and Cauchy
2. Goursat
3. Weyl
4. Exercises