

Chapter summaries in MAT2400 - Real analysis

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Chapter 1

Preliminaries: Proofs, Sets, and Functions

1.1 Proofs

1.2 Sets and boolean operations

1.3 Families of sets

1.4 Functions

1.5 Relations and partitions

1.6 Countability

Chapter 2

Metric Spaces

2.1 Definitions and examples

2.2 Convergence and Continuity

2.3 Open and closed sets

2.4 Complete spaces

2.5 Compact Sets

2.6 An alternative description of compactness

2.7 The completion of a metric space