Summary of Analysis

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Part I

Meausre and Integration

Chapter 1

Measures

1.1 Abstract Measures

1.1.1 σ-algebras

Definition 1. An *algebra* on X is a collection $\Sigma \subset \mathcal{P}X$ such that

1. $X \in \Sigma$
2. $A \in \Sigma \Rightarrow X \setminus A \in \Sigma$
3. $A, B \in \Sigma \Rightarrow A \cup B \in \Sigma$