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Analysis I
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Day 16 — Summary — Completion of a Vector Space

1. $\mathbb{R}$ can be defined as the set of equivalence classes of Cauchy sequences of $\mathbb{Q}$. This is called the completion of $\mathbb{Q}$.

2. The completion of a normed vector space is defined as the set of equivalence classes of Cauchy sequences of elements in the space. The completion is a complete normed vector space.