29 October 2015 Analysis I Paul E. Hand hand@rice.edu

Day 17 — Summary — Completion of a vector space

- 97. \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} .
- 98. 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.