

# REAL ANALYSIS

## MATH 205B/H140B, HW#2

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Chapter 10, exercises 26, 28, 36; Chapter 11, exercises 3, 10, 15, 16, 33, 35, and the following problem:

### Problem 1.

Prove that there exists a continuous function  $\gamma : [0, 1] \rightarrow \mathbb{R}^3$  such that  $\gamma([0, 1]) = [0, 1] \times [0, 1] \times [0, 1]$ .