

Problem Set 7  
Due Friday, May 22.

*Real Analysis*

Math 131A, Spring Quarter 2015

1. Do problems 18.1, 18.4, 18.5 in the textbook.
2. Let  $f: [0, 1] \rightarrow \mathbb{R}$  be a continuous function with  $f(0) = f(1)$ . Show that there is some  $x \in [0, 1]$  such that  $f(x) = f(x + \frac{1}{2})$ .