

# Exercises

E13.7 [14P] Prerequisites: [0S6]. Difficulty: \*.

Let  $C \subset \mathbb{R}$  be a closed set, and let  $f : C \rightarrow \mathbb{R}$  be continuous function. Show that there exists  $g : \mathbb{R} \rightarrow \mathbb{R}$  continuous and extending  $f$ , i.e.  $g|_C = f$ .

**Solution 1.** [14Q]