

Exercises

E7.4 [OD4] Difficulty:*. Show that from any sequence $(a_n)_n \subseteq \mathbb{R}$ we can extract a monotonic subsequence such that

$$\lim_{k \rightarrow \infty} a_{n_k} = \limsup_{n \rightarrow \infty} a_n \quad .$$

Solution 1. [OD5]