

Exercises

E11.21 [OZB] Let a_n be an infinitesimal decreasing positive sequence. Let $K \subseteq \mathbb{R}$ given by

$$K = \{0\} \cup \{a_n : n \in \mathbb{N}, n \geq 1\};$$

note that it is compact. Study the dimension of K in these cases:

- $a_n = n^{-\theta}$ with $\theta > 0$;
- $a_n = \theta^{-n}$ with $\theta > 1$.

Solution 1. [OZC]