

# Exercises

9.101 [OVJ] Prerequisites: [OQZ], [OVS]. Difficulty: \*.

Let  $(X, d)$  be a metric space such that every continuous function  $f : X \rightarrow \mathbb{R}$  has maximum: show that the space is compact.

(See [OTD] for a rewording with  $X = \mathbb{R}^n$ .) [ [OVK] ]

**Solution 1.** [OVM]