

Exercises

0.101 [OV4] Setting $X = \mathbb{R}^n$ and d the usual Euclidean distance, taken $C \subseteq \mathbb{R}^n$, use the above theorem [OV3] to show (as a corollary) the usual Heine-Borel theorem [48]: *C is compact if and only if it is closed and bounded.*

Solution 1. [OV5]