

## Exercises

E10.j.10 [2GB] Prerequisites: [OPR]. Let  $(X, d)$  be a totally bounded metric space. Let  $E \subseteq X$ , then  $E$  is a metric space with the restricted distance  $\tilde{d} = d|_{E \times E}$ . Show that  $(E, \tilde{d})$  is totally bounded. (See [OV3] for the definition of *totally bounded*).

**Solution 1.** [2GC]