Exercises

E8.91 [OM7] Prerequisites: [OKM] . Given X, given a base $\mathcal C$ for a topology σ

Solution 1. [OM8]

on X, and a base \mathcal{B} for a topology β on X, we have that $\sigma \supset \beta$ if

and only if for every $x \in X$ and for every $B \in \mathcal{B}, B \ni x$ there

exists $C \in \mathcal{C}, C \ni x, C \subseteq B$.