Exercises

11.57 [12T]Prerequisites:[124].

Recall that the operation $A \bullet B = (A \oplus B) \ominus B$ is called "closing".

- Show that $A \subseteq A \bullet B$.
- Let $X = \mathbb{R}^n$, $B = B_r = \{\|x\| < r\}$ a ball, find an example of a set A that is open non-empty bounded, and $A \bullet B = A$.
- Setting $X = \mathbb{R}^n$, $B = B_r$ a ball, find an example where $A \bullet B \neq A$.

Solution 1. *[12V]*