

# Exercises

E7.43 [OFJ] If  $\forall n \in \mathbb{N}, a_n, b_n \geq 0$  show that

$$\sum_{n=0}^{\infty} c_n = \sum_{n=0}^{\infty} a_n \sum_{n=0}^{\infty} b_n$$

with the convention that  $0 \cdot \infty = 0$ .