

Exercises

3.288 [064] Prerequisites: [018]. Show that

$$\limsup_{n \rightarrow \infty} A_n = \{x \in X : x \in A_n \text{ frequently in } n\} \quad (3.288)$$

$$\liminf_{n \rightarrow \infty} A_n = \{x \in X : x \in A_n \text{ eventually in } n\} \quad (3.289)$$

(“Frequently” and “eventually” are discussed in Sec. [26G]).