

Exercises

E7.43 [OFM] Prerequisites: [217]. Note: Known as: Mertens' theorem..

If the series $\sum_{n=0}^{\infty} a_n$ converges absolutely and $\sum_{n=0}^{\infty} b_n$ converges, show that the series $\sum_{n=0}^{\infty} c_n$ converges and

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

Solution 1. [OFN]

[[218]]