

Exercises

E19.1 [1N5] Prerequisites: [1DM].

Verify that the function $\varphi : \mathbb{R} \rightarrow \mathbb{R}$

$$\varphi(x) = \begin{cases} e^{-1/x} & \text{se } x > 0 \\ 0 & \text{se } x \leq 0 \end{cases}$$

(also seen in [1DM]) is not analytic.

Solution 1. [1N6]