

SHEET 6

Exercise 1

Let I, J finite or countable, and $(a_{i,j})_{i \in I, j \in J}$ a family of real numbers.

Assume $\sum_{j \in J^I} \left(\prod_{i \in I} |a_{i,j_i}| \right) < \infty$

Prove that

$$\prod_{i \in I} \left(\sum_{j \in J} a_{ij} \right) = \sum_{j \in J^I} \prod_{i \in I} a_{ij_i}$$

Exercise 2

Let $n \in \mathbb{N}^E$ be a current s.t. $\partial n = \{x, y\}$

Prove that $x \xrightarrow{n} y$.