

Exercises

3.258 [04Z] Prerequisites: [01P], [04R]. Difficulty: **. (Proposed on 2022-10-13)

(Solved on 2022-11-15)

Let A, B be infinite sets. Show that $|A^2| = |A|$.

Use this result to show that if A, B are not empty and at least one is infinite then $|A \times B| = \max\{|A|, |B|\}$.

Solution 1. [050]

See also the note [27H].