

Algebra I – autumn 2024 – Homework 3

1. Decide whether $(\mathbb{R} \setminus \{0\}, \circ)$ is a group if the operation \circ is given by

$$xy = \begin{cases} x \cdot y, & \text{je-li } x > 0, \\ \frac{x}{y}, & \text{je-li } x < 0. \end{cases}$$