

Subgroups

11th June 2022

Todo list

Q9 1

Problem 9

Prove that every finitely generated subgroup of \mathbb{Q} is cyclic. Prove that \mathbb{Q} is not finitely generated.

Solution. If $G \leq \mathbb{Q}$ is finitely generated, we have $G \cong \langle \frac{p_1}{q_1} \rangle$

Q9

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