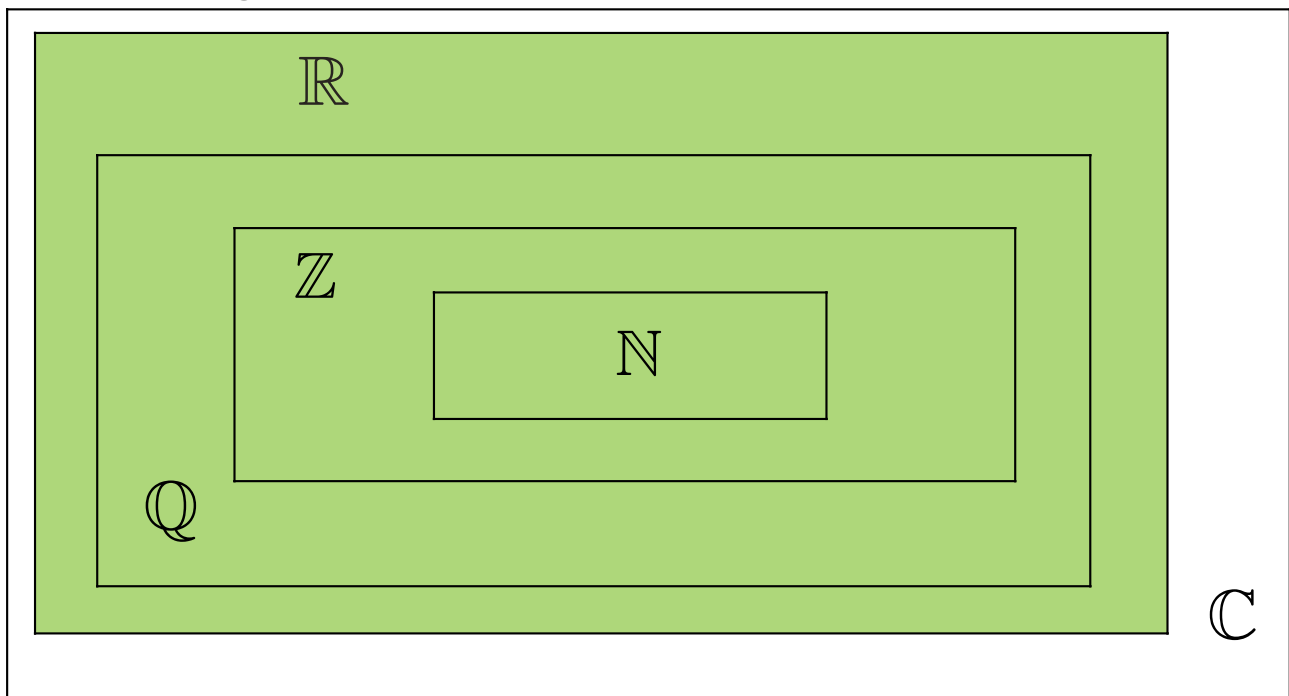


# Zahlenmengen



natürliche Zahlen:

$$\mathbb{N} = \{0; 1; 2; 3; \dots\} = \mathbb{Z}_0^+ \\ \mathbb{N} \subset \mathbb{Z}$$

natürliche Zahlen ohne Null

$$\mathbb{N} \setminus \{0\} = \mathbb{N}^* = \{1; 2; 3; \dots\} = \mathbb{Z}^+$$

ganze Zahlen

$$\mathbb{Z} = \{\dots; -3; -2; -1; 0; 1; 2; 3; \dots\}$$

ganze Zahlen ohne Null

$$\mathbb{Z} \setminus \{0\} = \mathbb{Z}^* = \{\dots; -3; -2; -1; 1; 2; 3; \dots\} \\ \mathbb{Z} \subset \mathbb{Q}$$

rationale Zahlen

$$\mathbb{Q} = \left\{ \frac{a}{b} \mid a \in \mathbb{Z} \wedge b \in \mathbb{Z}^* \right\} \\ \mathbb{Q} \subset \mathbb{R}$$