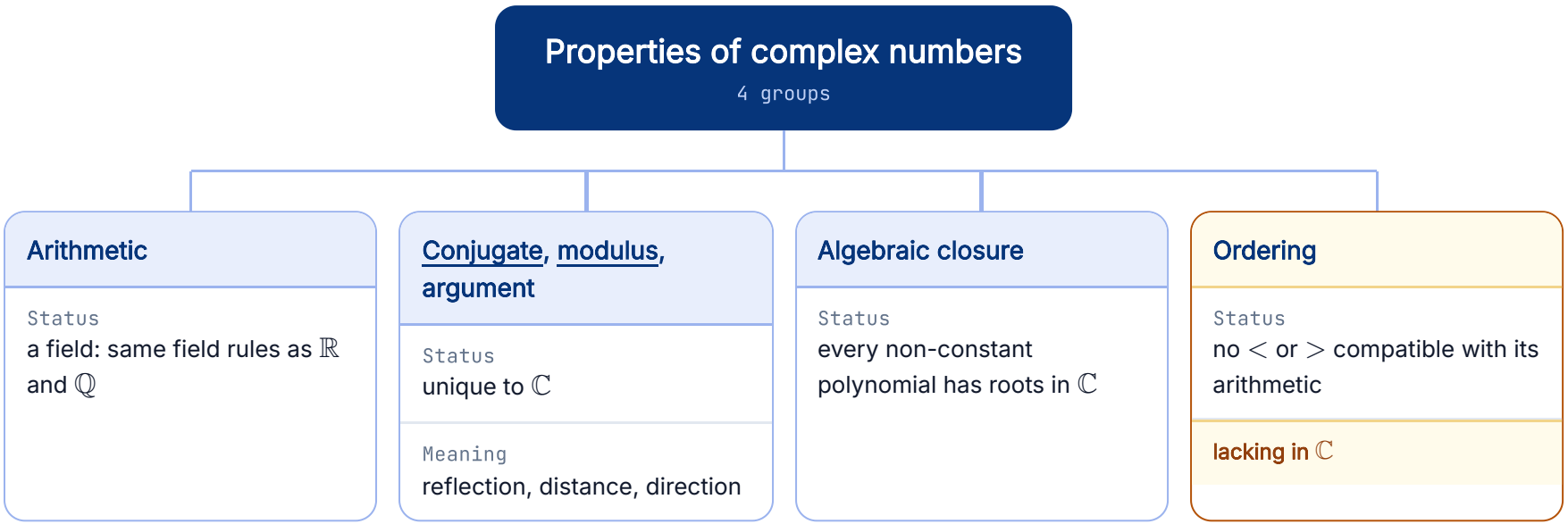
BEFORE YOU READ

What the complex numbers have, and lack

The properties of $\mathbb{C}$ fall into four groups: what it shares with the reals, what is new, what it guarantees, and what it gives up.



TAKEAWAY

A trade

$\mathbb{C}$ gains roots for every non-constant polynomial and loses any ordering compatible with its arithmetic.