

Numbers

Set	Group	Ring	Field	Count/Complete
\mathbb{N}	-	-	-	countable
\mathbb{Z}	$(\mathbb{Z}, +)$	$(\mathbb{Z}, +, \cdot)$	No mult. operation except from 1, -1	countable
\mathbb{Q}	$(\mathbb{Q}, +)$	$(\mathbb{Q}, +, \cdot)$	$(\mathbb{Q}, +, \cdot)$	ordered field, countable, infinite, not complete
\mathbb{R}	$(\mathbb{R}, +)$	$(\mathbb{R}, +, \cdot)$	$(\mathbb{Q}, +, \cdot, \leq)$	not countable, complete, metric space $ \cdot $
\mathbb{C}	(\mathbb{C}^*, \cdot)	$(\mathbb{C}, +, \cdot)$	$(\mathbb{C}, +, \cdot)$	complete $ \cdot $

Note: \mathbb{N} , \mathbb{Z} , \mathbb{Q} have the same cardinality.