Why

We want to order the real numbers.[1]

Definition

Let $R, S \in \mathbf{R}$. If $R \subset S$ and $R \neq S$ then we say that R is *less than S*. If $R \subset S$ then we say that R is *less than or equal to S*.

Notation

If R is less than S we write $R < S$. If R is less than or equal to S we write $R \leq S$.

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[1]Future editions will expand

Real Order

Real Numbers

Rational Numbers

Integer Arithmetic

Natural Additive Identity   Natural Multiplicative Identity

Identity Elements   Arithmetic

Operations   Natural Exponents   Integer Products

Functions   Natural Products   Integer Sums

Natural Sums   Integer Numbers

Recursion Theorem   Equivalence Relations

Relations   Peano Axioms

Cartesian Products   Natural Induction

Set Powers   Natural Numbers

Unordered Triples   Successor Sets   Intersection of Empty Set   Partitions

Ordered Pairs   Pair Unions   Set Intersections

Set Unions   Set Differences

Unordered Pairs   Empty Set   Pair Intersections

Set Specification

Set Inclusion

Standardized Accounts

Definitions   Accounts

Deductions   Quantified Statements

Logical Statements

Statements

Identities   Sets

Names

Objects   Letters