Real Numbers

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Definition 1: [rational_numbers]/ dedekind_cuts

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Definition 2: [rational_numbers, dedekind_cuts, ordered_field]/ real_numbers

The set of real numbers $(\mathbb{R}, +, -, *, \leq)$ is an ordered field that can be defined as one of the following:

1. The set of dedekind cuts of the rational numbers.

2. The set of all numbers that can be represented as a decimal number.

3. The unique linearly ordered field that is complete (up to isomorphism).