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topic entry on rational numbers

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Synonym	entries on rational numbers
Related topic	TopicEntryOnRealNumbers

PlanetMath articles concerning the rational numbers

Definition

- rational number
- fraction

Properties

- commensurable numbers
- rational algebraic integers

Forms

- partial fractions
- any rational number is a sum of unit fractions
- Egyptian fractions
- mixed fraction
- decimal fraction
- decimal expansion
- order valuation
- continued fraction

Where are rational numbers?

- rational points on one dimensional sphere
- rational sine and cosine
- rational Briggsian logarithms of integers
- irrational to an irrational power can be rational

- square roots of rationals
- Roth's theorem
- rational root theorem
- canonical form of element of number field
- <http://planetmath.org/node/12127>solutions of the equation $x^y = y^x$

Sets

- rings of rational numbers
- prime subfield
- proof that the rationals are countable
- another proof of cardinality of the rationals
- dense set

Polynomials and functions

- Bernoulli polynomials and numbers
- Euler polynomials
- Dirichlet's function
- a pathological function of Riemann

Rational vs. irrational

- theory of rational and irrational numbers