**General facts[**[**edit**](http://en.wikipedia.org/w/index.php?title=Definable_real_number&action=edit&section=1)**]**

Assuming they form a set, the definable numbers form a [field](http://en.wikipedia.org/wiki/Field_(mathematics)) containing all the familiar real numbers such as [0](http://en.wikipedia.org/wiki/Zero), [1](http://en.wikipedia.org/wiki/One), [π](http://en.wikipedia.org/wiki/Pi), [*e*](http://en.wikipedia.org/wiki/E_(mathematical_constant)), et cetera. In particular, this field contains all the numbers named in the [mathematical constants](http://en.wikipedia.org/wiki/Mathematical_constant) article, and all [algebraic numbers](http://en.wikipedia.org/wiki/Algebraic_number) (and therefore all [rational numbers](http://en.wikipedia.org/wiki/Rational_number)). However, most real numbers are not definable: the [set](http://en.wikipedia.org/wiki/Set_(mathematics)) of all definable numbers is [countably infinite](http://en.wikipedia.org/wiki/Countably_infinite) (because the set of all logical formulas is) while the set of real numbers is [uncountably infinite](http://en.wikipedia.org/wiki/Uncountable_set) (see [Cantor's diagonal argument](http://en.wikipedia.org/wiki/Cantor%27s_diagonal_argument)). As a result, [most](http://en.wikipedia.org/wiki/Almost_all) real numbers have no description (in the same sense of "most" as 'most real numbers are not rational').