

Download Algebra Closed Number System

In linear algebra, the linear span of a set X of vectors is the closure of that set; it is the smallest subset of the vector space that includes X and is closed under the operation of linear combination. The set of rational numbers is closed under all four basic operations, that is, given any two rational numbers, their sum, difference, product, and quotient is also a rational number (as long as we don't divide by 0). The Irrational Numbers. An irrational number is a number that cannot be written as a ratio (or fraction). In decimal form, it never ends or repeats. A number system in algebra is a set of numbers — and different number systems are used to solve different types of algebra problems. Number systems include real numbers, natural numbers, whole numbers, integers, rational numbers, irrational numbers, even numbers, and odd numbers. The oldest and most elementary number system is the set of natural numbers (also known as counting numbers) $N = \{1, 2, 3, \dots\}$ The natural numbers are constructed from the first natural number 1 by successively adding 1 each time: $2 = 1 + 1$. $3 = 2 + 1$... The next natural number after N is then $N + 1$. . There is no largest natural number.