

Mathematics in Ancient India:

Ancient and medieval Indian mathematical works, all composed in Sanskrit, usually consisted of a section of sutras in which a set of rules or problems were stated with great economy in verse in order to aid memorization by a student.

A later landmark in Indian mathematics was the development of the series expansions for trigonometric functions (sine, cosine, and arc tangent) by mathematicians of the Kerala school in the 15th century CE. Their remarkable work, completed two centuries before the invention of calculus in Europe, provided what is now considered the first example of a power series (apart from geometric series). However, they did not formulate a systematic theory of differentiation and integration, nor is there any direct evidence of their results being transmitted outside Kerala.

Excavations at Harappa, Mohenjo-daro and other sites of the Indus Valley Civilization have uncovered evidence of the use of "practical mathematics". The people of the IVC manufactured bricks whose dimensions were in the proportion 4:2:1, considered favourable for the stability of a brick structure.

The religious texts of the Vedic Period provide evidence for the use of large numbers.

Baudhayana (c. 8th century BCE) composed the Baudhayana Sulba Sutra, the best-known Sulba Sutra, which contains examples of simple Pythagorean triples.

An important landmark of the Vedic period was the work of Sanskrit grammarian, Pāṇini (c. 520–460 BCE). His grammar includes early use of Boolean logic, of the null operator, and of context free grammars, and includes a precursor of the Backus–Naur form (used in the description programming languages).

Jaina mathematicians are important historically as crucial links between the mathematics of the Vedic period and that of the "Classical period".

It is well known that the decimal place-value system in use today was first recorded in India, and then transmitted to the Islamic world, and eventually to Europe.

In such a way India has a great tradition of Mathematics.