

# Principle of Vedic Mathematics Sutras and Tricks

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**Abstract:** *An Ancient system of Indian mathematics is known as Vedic mathematics. It is a gift given to this world by ancient stages of India. The Vedic mathematics was constructed using 16 formulas called sutras and 13 upa-sutras. The Vedic mathematics is designed in a way that calculations are carried out mentally. The main fact about Vedic mathematics was, for any difficult problem the answer should be calculated in one line. Vedic sutras are applicable in all fields and this can be applied directly to plain, spherical geometry, trigonometry, conics, calculus and applied mathematics of various kind. Vedic mathematics is a part of four Vedas. Sthapathya-veda, which covers the concepts of civil engineering and architectures this is an upa- Veda of atharva Veda. Sutra is given a very short formula to carry out difficult mathematical calculations in a very easy and simple manner and to executing them mentally. These sutras are used for multiplication, division, factorization, recurring decimals and solutions of simple equations. Quadratic equation, system of equations, integration by partial fraction and differential calculus are used. Some topics of geometry such as Pythagorean Theorem, and some theorems of Apollonius and it also covers more advanced mathematics such as analytical expressions of straight line and analytical conics.*

**Keywords:** -Vedic Mathematics, Sutras, Multiplication, Division and Equations.

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