



## About the Author of Book of Vedic Mathematics

The source book by Jagatguru Swami Bharati Krishna Tirthji Maharaj on Vedic Mathematics has proved to be a boon for enhancing the quality of teaching of Mathematics. Swamiji interpreted 16 manuscripts and each manuscript contained a detailed explanation of a mathematical formula. But these manuscripts were destroyed by his disciple. When Swamiji came to know about the disappearance of these manuscripts, he wrote an introductory text based on these sixteen sutras. But due to ill health, he could not do much work in this subject. Swamiji disappeared into Mahasamadhi in 1960. The subject material written in the first book of Vedic Mathematics is insufficient but this shortcoming of Vedic Mathematics can be filled by continuous efforts.

Swamiji was born on March 14, 1884, in a highly educated family. His father's name was Shri P. Narasimhan Shastra who retired as Deputy Collector. Jagadguru's childhood name was Venkataraman. He was a very intelligent student from his childhood and kept getting the first position in all the classes. He passed his matriculation examination from Madras University in January 1899.

Swami Bharati Krishna Tirtha ji was a great scholar of Sanskrit. He was also awarded the title of Saraswati by the organization of Madras Sanskrit in July 1899. Swamiji passed M.A. examination in Sanskrit, Philosophy, English, Mathematics, History and Science from the American College of Sciences, Rochester, New York in 1903 and he also studied vedanta philosophy and Brahma Sadhana for eight years.

Jagatguru Shankracharya, Shri Madhu Sudan Tirtha Ji of Goverdhan Math was very impressed with him. When he was ill, he requested Swami Bharati Krishna Tirtha ji to adorn the Goverdhan Math throne. Swamiji accepted this responsibility very easily.

The four Vedas Rigveda, Samveda, Yajurveda and Atharvaveda are world-famous. Of these Vedas, the Atharva Veda includes the knowledge of architecture, engineering and general mathematics. The author compiled 16 *sutras* (aphorisms) and 13 *upsutras* (Corollaries) which he claimed to be perceived from *Atharva Veda* and named it Vedic Mathematics. The beauty of Vedic mathematics is its simplicity and unified methodology. The system of Vedic mathematics is a different mathematical approach based on ancient Indian philosophy. It is the manifestation of the integrated and consistent structure of arithmetic and algebra. Swami Ji declared that using sutras and upsutras of Vedic Mathematics, all branches of mathematics can be developed to teach the students.

## Objectives of teaching Vedic Mathematics

1. To develop interest of the students in learning Mathematics.
2. To save the time of students in solving mathematics problems.
3. To motivate learners to study Mathematics.
4. To develop the critical thinking and reasoning power of the learners.
5. To develop confidence of the learners for solution of maths problems.



6. To enhance the memory of the learners.
8. To boost the speed and accuracy for success in competitive examinations
9. To sharpen the mind, increases mental ability and intelligence

### Importance of Vedic Mathematics

Due to the oral solutions of most of the mathematical problems by the Vedic Mathematics Sutras, it is called mental mathematics. The practice of mental mathematics develops concentration and memory in the human mind. The maturity of thoughts is attained by the intensity of his contemplation. This type of thought flow creates a strong personality.

There is also a message in Vedavani that what a man thinks in his mind, his speech manifests itself. He acts according to what he says. As he behaves, so he becomes a human being.

Vedic Mathematics generates a sense of curiosity in the human mind due to its simplicity. This sense of curiosity makes him aware. With practice, this awareness becomes more manifest and fills the human mind with mental powers. This practice awakens his inner consciousness and thus leads to the development of the personality and divinity of man.

According to modern psychology, even a very intelligent person uses only about 20% of his total mental capacity and the remaining capacity of his mind remains in vain. The 16 sutras and 13 upsutras of Vedic mathematics are important sources in the awakening of the inner consciousness, which opens the door to the truth of life and the world. According to Swami Bharati Krishna Tirtha ji, the author of Vedic Mathematics book, the rate of development of the human brain becomes 5 or 6 times more than the normal speed due to the study of Vedic mathematics. Vedic Mathematics develops the human mind to the fullest.

It is a matter of great happiness that many educational institutions have understood the importance of Vedic Mathematics and have also made the teaching of Vedic Mathematics compulsory in their educational institutions.



### Experiences of Vedic Mathematics Readers

1. Vedic Mathematics is a boon for competitive exams.
2. Vedic Mathematics is very interesting and far beyond our imagination.
3. Our ancestors were very advanced in mathematics.
4. If Vedic Mathematics was taught to us from the beginning, computers would have been built in India.
5. After going through Vedic Mathematics, it seems that we should learn Sanskrit.
6. Every person in the world should know about Vedic Mathematics.
7. Revolution is possible in education with the use of Vedic Mathematics.
8. Vedic Mathematics provides information about the mystery of nature
9. Mental calculations are possible by the applications of Vedic Mathematics.
10. The study of Vedic Mathematics was the most interesting and enjoyable period in my life.
11. Due to study Vedic Mathematics, I have keen interest in learning mathematics and it fascinated me to learn a lot.
12. The learning Vedic Mathematics brought me joy that I have no words to express.

### Sutras of Vedic Mathematics

Sr.	Name of Sutras	Meaning of Sutras
1	Ekadhikena Purvena	By one more than the previous one.
2	Nikhilam Navatascaramam Dasatah	All from 9 and the last from 10.
3	Urdhva-tiryagbhyam	Vertically and crosswise.
4	Paravartya Yojayet	Transpose and adjust.
5	Sunyam Samyasamuccaye	When the sum is the same, that sum is zero.
6	(Anurupye) Sunyamanyat	If one is in ratio, the other is zero.
7	Sankalana - vyavakalanabhyam	By addition and by subtraction.



8	Puranapuranyam	By the completion or non-completion.
9	Calana-Kalanabhyam	Differential Calculus
10	Yavadunam	Whatever the extent of its deficiency.
11	Vyastisamasti	Part and whole.
12	Sesanyankena Caramena	The remainders by the last digit.
13	Sopantyadvayamantyam	The ultimate and twice the penultimate.
14	Ekanyunena Purvena	By one less than the previous one
15	Gunitasamuccayah	The Product of the Sum
16	Gunakasamuccayah	All the Multipliers

### Upsutras of Vedic Mathematics

Sr. No.	Name of Upsutras	Meaning of Upsutras
1	Anurupyena	Proportionately
2	Sisyate Sesasamjnah	The Remainder Remains Constant
3	Adyamadyenantyamantyena	First by First and Last by Last
4	Kevalaih Saptakam Gunyat	Only Multiples of Seven
5	Vestanam	Osculation
6	Yavadunam Tavadunam	Whatever the deficiency, lessen it further
7	Yavadunam Tavadunikritya Varganca Yojayet	Lessen it further to that extent and set up the square of deficiency.
8	Antyayordasake'pi	When the sum of last digits is ten.
9	Antyayoreva	Only the last term
10	Samuccayagunitah	Sum of the coefficients in the product
11	Lopanasthapanabhyam	By Elimination and Retention
12	Vilokanam	By observation
13	Gunitasamuccayah Samuccayagunitah	The product of the sum of coefficients in the factor is equal to the sum of Coefficients in the product.