## Founders of Vedic Mathematics- Continued

“Shri Bharati Krishna Tirtha”.( ïI Éarit k«:[ tIwR) (1884 – 1960) who was Shankaracharya at Dwaraka peetha and Gordhan Mat at Orrisa wrote “Ganita-Sutras” or easy Mathematical Formulas on which he compiled the monumental work “Vedic Mathematics” an original contribution in the field of Mathematics and Research. Bharati Krishnaji got the key to Ganita Sutra coded in the Atharva Veda and rediscovered Vedic Mathematics with the help of lexicography . He found “ Sixteen Sutras” or word formulas which cover all the branches of Mathematics - Arithmetic, Algebra, Geometry, Trigonometry, Physics, plan and spherical geometry, conics, calculus- both differential and integral, applied mathematics of all various kinds, dynamics, hydrostatics and multiple scientific applications.

This year introduction of the scholar in Vedic Mathematics is **Pingala (BCE 300 – BCE 200)** Pingala is one of a the oldest known Vedic Mathematics scholars; He was a musical theorist who authored the ***Chhandas Shastra*** (*chandaḥ-śāstra)*, Sanskrit meter for writing poems. There is evidence that in his work on the enumeration of syllabic combinations, Pingala stumbled upon both the Pascal triangle and Binomial coefficients, Pingala's work also contains the basic ideas of Fibonacci numbers (called *maatraameru*). Although the *Chandah sutra* hasn't survived in its entirety, a 10th-century commentary on it by Halāyudha

Some practical examples for the use of Vedic Mathematics

**1.2.1 Name of the Vedic Sutra :** *Sulba Sūtra / Baudhāyana Śulbasûtra* :

**dīrghasyākṣaṇayā rajjuḥ pārśvamānī, tiryaḍam mānī,  
cha yatpṛthagbhūte kurutastadubhayāṅ karoti.**

A rope stretched along the length of the diagonal produces an area which the vertical and horizontal sides make together.

Practical proof with paper folding, refer to picture below. In the picture sum of all triangles area plus area of inner square is equal to sum of outer square. I.e.

