

## CONCEPT OF PYTHAGOREAN THEOREM AND TRIPLES AND ITS EXPANSION SINCE EARLY PERIOD TO MEDIEVAL PERIOD IN INDIA

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*This article examines the relevance of ‘The Pythagorean Triples’ in mathematics based on (a) geometry during ancient Vedic period and (b) arithmetic and geometry in classical medieval period. Baudhāyana recorded in Śulba Sūtras ( aphorism) that square of diagonal of a rectangle was the sum of squares of its adjoining two sides sometime around 800 BCE. Sūtras were used for preparing altars in performing sacrificial rites. Following him, other Śulbakāras during 800-200 BCE and number of commentators afterwards enriched the geometry towards proto-algebra at its height and. Great masters of Indian mathematics in its medieval period had shown their prowess for independent development of algebraic form of solutions of Pythagorean triples while dealing with the relation of sides of triangle and quadrilateral.*

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