JOURNEY OF QUADRATIC EQUATION FROM VEDIC PERIOD TO MODERN MATHEMATICS

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Abstract

Hindu algebra is expected to be originated in the period of śulba (800-500 B.C.) and the Brâhmana (c. 2000 B.C.). We get the earliest instances of solving the quadratic equation from the śulba-sūtras. In this paper we will discuss the different solutions and use of quadratic equation as found in the śulba-sūtras, Babylonian mathematics, Arab mathematics, Bakhshālī Treatise, and as discussed by other Indian mathematicians like $\overline{A}$ryabhaṫa I (499 A.D.), Brahmagupta (b.598 A.D.), Mahâvîra (850 A.D.), Śrīdhara (c.750), Śrîpati (1039 A.D.), Bhâskara II (b. 1114 A.D.) etc. This paper reveals the fact that the solving of quadratic equation, in general form is often credited to ancient Indian mathematicians.

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