

GEOMETRICAL CONTRIBUTION OF ŚRĪDHARĀCĀRYA

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The scholars of Indian mathematics are well conversant with the names Āryabhaṭa I, Varāhamihira, Bhāskara I, Brahmagupta, Lalla, Śrīdharācārya and others belonging to 5th – 8th century CE. Perhaps many of us know their identity as mathematicians or astronomers or astronomer-mathematicians. But we can be quite sure of the fact that most of the students of high schools in India are aware of the name Śrīdharācārya in particular. This is because, the quadratic equations in one variable and the formula which gives its general solution (usually known as Śrīdharācārya's formula) are included in their mathematics syllabus. In the present article an attempt will be made to discuss not his contribution to algebra or arithmetic but to geometry and mensuration. For that reason, we shall at first present all the geometrical (including mensuration) works of Śrīdharācārya from his treatise Trī-śatikā (i.e., Pāṭīganītasāra). Thereafter the precision of these rules, formulae and properties, contributed by him, will also be referred.
