INFINITE SERIES BEFORE ALGEBRA AND CALCULUS

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ABSTRACT

In calculus books infinite series usually are studied after derivatives and integrals, mainly in Taylor Series' form. This way we taught students that infinite series are Taylor series' and can be expanded using derivatives only.

Indian mathematicians found many series before calculus was discovered in Europe, many of those series were expanded based in geometry. Some series were used to approximate sine values tables and π with thirteen exact decimals, centuries before European mathematicians.

In this poster we give a brief collection of Indian advances of infinite series expansions without using calculus. Some expansions will be shown in geometrical form.

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