

# Biographical Encyclopedia of Astronomers

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Yativṛṣabha

Flourished Prākṛit, Jadivasaha, (India), 6th century

Little is known about Yativṛṣabha. He was a Jain monk who studied under Ārya Mañkṣu and Nāgahastin. He composed, along with other traditional Jain works, the *Tiloyapaṇṇatti* (in Sanskrit, *Trilokaprajñapti* or Knowledge on the Three Worlds), a work on Jain cosmography. This work describes the construction of the Universe expressed in specific numbers; For example, the diameter of the circular Jambu continent, upon which India is located, is 100,000 yojanas and its circumference is 316,227 yojanas, 3 krośas, 128 dandas, 13 angulas, 5 yavas, 1 yūkā, 1 rikṣā, 6 karmabhūmivālagras, 7 madhyabhogabhūmivālagras, 5 uttama bhogabhūmivālagras, 1 rathareṇu, 3 trasareṇus, 2 sannasannas, and 3 avasannasannas, plus a remainder of 23213/105409. Yativṛṣabha also gives formulas for calculating the circumference (C) and the area (A) of a circle having a diameter of  $d$ :

$$C = \sqrt{10d^2}, A = C \cdot \frac{d}{4}$$

*Setsuro Ikeyama*

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