

Aryabhatta, one of the greatest mathematicians of the world began a new epoch in Indian astronomy and mathematics.

His book Aryabhatiya is a masterpiece of brevity and eloquence.

चतुराधिकं शतमष्टगुणं द्वाषष्टिस्तथा सहस्त्राणाम्। अयुतद्वयं विष्कम्भस्य आसन्नौ वृत्तपरिणाहः॥

Chaturadhikam shatamashtagunam dvaashashtitathaa sahasraanam | Ayutadvaya vishkambhasya aasanno vrittaparinaaha | |

Add 4 to 100, multiply by 8 and add to 62000. This is approximately the circumference of a circle whose diameter is 20000 units.

$$(100 + 4) \times 8 + 62,000 = 62,832$$

$$TT = \frac{Circumference}{Diameter} = \frac{62,832}{20,000} = 3.1416$$