Sanskrit Katapayadi based Shloka (verse) to remember 30 decimal digits of π Learn, Play, Create. - chooMantra - Its Magical - Rajeev G. Mavinkurve

Assamese.

Bengali

Gujarati

Kannada

Malayalam

leetei Mayak

Oriya

Puniabi

Telugu

Indic

Mathematic

About π

π (pi) is a constant which is the ratio of a circle's circumference to its diameter. The symbol π (16th letter of Greek alphabet) was first used by British mathematician

William Jones in 1706 to represent the ratio and was popularized by Swiss mathematician Leonhard Euler, who adopted it in 1737. "pi" itself was derived from the 1st letter of the Greek word perimetros (means circumference)

Its the famous irrational number. In 1761, Johann **Heinrich Lambert** proved that π is irrational: that is, it cannot be expressed as a ratio of integer numbers.

In 1882, Ferdinand von Lindemann proved that π is transcendental as well. A transcendental number is a possibly complex) number that is not an algebraic number that is, not a root (i.e., solution) of a nonzero polynomial equation with integer coefficients.

The concept of pi has been in use since 2000 BCE.by Babylonians, Indians, Chinese, Arabs. Early in the 20th century, Indian mathematician Sriniyasa Ramanuian developed exceptionally efficient ways of calculating pi that were later incorporated into computer algorithms

Diagrammatic representation of π rcumference

Reflection of π approximation, 3.14 appears like 'PIE' Archimedes estimated π by calculating perimeter of a regular polygon inscribed within the unit circle and a regular polygon circumscribing the circle

Digits of π



The most accurate value of pi is 50 trillion digits, and was achieved by Timothy Iullican (US) of North Alabama Charitable Computing on 29 Jan 2020.

11 decimal digits are accurate enough to estimate the circumference of any circle, that fit inside our earth, with an accuracy of less than 1 mm. 39 digits can estimate the circumference of any circle within the observable universe with a precision comparable to the radius of a hydrogen atom. NASA uses pi rounded to the 15th decimal. 3.141592653589793

sieeManira.

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Compiled, Edited & Designed by Rajeev G.Mavinkurve

गोपीभाग्यमधु व्रात-शृङ्गिशोदधिसन्धिग खलजीवितखाताव गलहालारसं धर ॥

gopībhāgyamadhuvrāta-śrngiśodadhisandhiga. Khalajīvitakhātāva galahālārasamdhara..

gopIbhAgyamadhuvrAta-zRGgizodadhisandhiga . KhalajIvitakhAtAva galahAlArasaMdhara .. Kyoto gopIbhAgyamadhuvrAta-shR^i~Ngishodadhisandhiga . ITRANS KhalajIvitakhAtAva galahAlArasaMdhara .. gopIBAgyamaDuvrAta-SfNgiSodaDisanDiga . SLP1 KalajIvitaKAtAva galahAlArasaMDara ..

gopiibhaagyamadhuvraata-"s.r"ngi"sodadhisandhiga . Velthius khalajiivitakhaataava galahaalaarasa.mdhara .. gopIBAgyamaXuvrAwa-SqfgiSoxaXisanXiga . KalajIviwaKAwAva galahAlArasaMXara .. wx

ဂေါပီဘာဂျမဓုပြာတ-၈ၖဂ်ိဳဧောဒဓိသန္ဓိဂ ၊ ခလဇီဝိတခါတာ၀ ဂလဟာလာရသံဓရ ။ Rurmese (Mvanmar) гопйбхагйамадхуврата-шрнгишодадхисандхига кхаладжйвитакхатава галахаларасамдхара... Cyrillic (Russian)

ทุกกรณีจะรากายาส(เมรายา-การตากครรณสามาริกก x เกาเกียวกลาสามารถ Javanese

ගෝපීභාග්යමධුව්රාත-ශෘඞ්ගිශෝදධිසන්ධිග ඛලජීවිතඛාතාව ගලහාලාරසංධර .. Sinhala โคปีภาคยมธวราต-ศฤงคิโศทธิสนธิค ฯ Tha

> ख ल

Kha

The shloka decoded using the

bove) will give the below 3

digit number

314159265358979323846264338

as shown in the table to the

rst digit will yield the value o

pi correct to 30 decimal digits

FIRST MEANING:

(Oh Krishna,) the fortune of the Gopis, the detoryer of the demon Madhu, protector of cattle, the one who ventured the ocean-depths, destroyer of evildoers, one with plough on the shoulder and the bearer of nectar, may (you) protect (us)!

SECOND MEANING:

Benefactor of the downtrodden, Pashupatil ford of kallasha, Vishnu's friend destroyer of all evil, one who held poison in his throat() Shivaly protect me.

THIRD MEANING:-This shloka has a mathematical meaning too. It has 30 decimal places of pi encoded. (It is believed to have a self sustained master key to calculate pi upto any number of places)

গোপীভাগ্যমধুৱাত-শৃঙ্গিশোদধিসন্ধিগ ৷ খলজীৱিতখাতার গলহালাৰসংধৰ ॥

ગોપીભાગ્યમધુવ્રાત-શૃઙ્ગિશોદધિસન્ધિગ ખલજીવિતખાતાવ ગલહાલારસંધર ..

ಗೋಪೀಭಾಗ್ಯಮಧುವ್ರಾತ-ಶೃಂಗಿಶೋದಧಿಸಂಧಿಗೆ . ಖಲಜೀವಿತಖಾತಾವ ಗಲಹಾಲಾರಸಂಧರ ..

ഗോപീഭാഗ്യമധുവ്രാത-ശ്യംഗിശോദധിസന്ധിഗ ഖലജീവിതഖാതാവ ഗലഹാലാരസന്ധര ..

॥ गाध्यशोद्धम् । गाध्यशोद्धम् । गाध्यशोद्धम् । गाध्यशोद्धम् । ।।। भाष्ट्रस्थ । ।।। भाष्ट्रस्थ ।।।। भाष्ट्रस्थ ।।।। भाष्ट्रस्थ ।।।। भाष्ट्रस्थ ।।।। भाष्ट्रस्थ ।।।।

ଗୋପୀଭାଗ୍ୟମଧୁବାତ-ଶୃଙ୍ଗିଶୋବଧିସନ୍ଧିଗ । ଖଲଜୀବିତଖାତୀବ ଗଲହାଲାରସଂଧର ॥

ਗੋਪੀਭਾਗਤਮਧੁਵਾਤ-ਸ਼ੁਙ੍ਗਿਸ਼ੋਦਧਿਸਨ੍ਧਿਗ ਖਲਜੀਵਿਤਖਾਤਾਵ ਗਲਹਾਲਾਰਸਧਰ ॥

கோபீபாக்யமதுவ்ராத ஷ்ருகிஷோததிஸந்திக காலஜீவிடகாதாவ கலஹாலாரஸம்தர

గోపీభాగ్యమధు్రవాత-శృంగిశోదధిసంధిగ ఖలజీవితఖాతావ గలహాలారసంధర...

گوبِيبهاڭْيَمَدهُوْراتَ شْرِنْگِشودَدهِسَنْدهِگَ۔ كَهَلَجِيوِتَكَهاتاُوَ گَلْهالارَسَندَهَرَ۔

Katapayadi

ขลชีวิตขาตาว คลหาลารส์ธร ฃ

The "ka-Ta-na-va" method (developed and used by ancient Indian mathematicians. grammarians & musicians) is a tool to map Sanskrit Devanagari letters to numbers and encode numbers in easy to remember verse.

All independent vowels are assigned 0. All independent consonants (without a attached vowel) are ignored. Consonants (with any vowel) are given values as per table on the right.

ख ग घ ङ च <mark>छ ज</mark> झ ञ ट ठ ड ढ ण त थ द ध न ज ऋ ऋ ल ल ए ऐ ओ औ अं प फ ब भ म र ल व श ष स ह

য় स ग 3 ल

lā

sam dha

la

About the Shloka

The Samskrutam (Sanskrit) Shloka (verse) at the outset appears to be the praise for Lord Krishna. At another level, it is a dedication to Lord Shiva. Thus, while offering mantric devotional praise to God, it has also encoding of pi value.

kaTapayadi rule will decode the number encoded in the shloka. The details of the rule/method and the process of decoding this shloka using kaTapayadi rule o get the encoded value are done on this poster.

It is said that this shloka has a master key to calculate pi upto any number of places. I have not figured it out yet. When figured out, a new poster will be done to explain the same.

T Day

March 14 marks Pi Day, an annual celebration of the mathematical sign pi. Founded in 1988 by physicist Larry Shaw, March 14 was selected because the numerical date (3.14) represents the first three digits of pi. and it also happens to be Albert Einstein's birthday In 2009, the United States House of Representatives supported the designation of Pi Day

International Day of Mathematics

UNESCO's 40th General Conference decided Pi Day as the International Day of Mathematics in November 2019.

This day is the birth anniversary of Einstein as well as Vedic Mathematics book author Jagadguru Shankaracharva Swami Bharati Krishna Tirtha

Vedic Mathematics Book



Vedic Mathematics is a book written by the Indian seer Jagadguru Shankaracharya Swami Bharati Krishna Tirtha, and was first published in 1965. It contains a list of mathematical techniques, which the author says

were retrieved from the Vedas and supposedly contained all mathematical knowledge. This shloka is mentioned in this book and it contains several amazing mathematics tricks.

About Sanskrit

Samskrtutam (Sanskrit) is one of the oldest languages of the world and mother of languages. It has vast treasures of knowledge on various topics including music, art, architecture, maths, economics, literature, life, spirituality, yoga, ayurveda, astronomy, astrology to name a few. In fact, Vedas means knowledge. Sutras are a distinct type of literary composition, a compilation of short aphoristic statements. Each sutra is any short rule, like a theorem distilled into few words or syllables. around which teachings of ritual, philosophy, grammar, or any field of knowledge can be woven. Sanskrit Grammar Panini's Astaadhyayi is full of sutras Pāṇini has been considered the 'first descriptive linguist" and even labelled as "the father of linguistics. Disambiguation, mnemonics, aphorisms, encoding schemes and other amazing techniques makes

Sanskrit one of the world's most sophisticated languages. @RajeevGM This Quick Reference sheet is proudly and lovingly dedicated to my Dad, philantrophist. Karma Yogi, Sahitya Ratna late Dr.G.H.Mavinkurve.

Give a man a bowl of rice, you feed him for a day. Teach him farming, you not only feed him for life, but also empower him to feed others for life - Rajeev G.Mayinkurve

khā

ta