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# The Attractiveness and Significance of Numerical Number 108 

## Research Article

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#### Abstract

Numbers are very important role in a daily life.In that, every number having its own importance. Among these numbers, 108 is having much more importance than other numbers and also 108 can be referring in many areas. This manuscript describes the importance of 108 and why people believe 108 is a communicative of the God and the history says 108 can repeat many number of times in different ways. The glories of 108 is it can be expressed in many situation like mathematical, astrology, religions, medical, human body, relationship between human body and god and importance of time.


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## 1. Introduction

The specific numbers 1,0 and 8 represent one thing, nothing and everything and 108 characterise the ultimate reality of the universe. Many East Asian martial arts trace their roots back to Buddhism, specifically to the Buddhist Shaolin Temple. Because of their ties to Buddhism, 108 has become an important symbolic number in a number of martial arts styles. The Chinese school of martial arts agrees with the South Indian school of martial arts on the principle of 108 pressure points [1]. Mukhya Shivaganas are 108 in number and hence Shaiva sects, particularly Lingayats, use 108 rudraksha beaded lace for japa. In Gaudiya Vaishnavism, there are 108 gopis of Vrindavan. Recital of these names, often accompanied by the counting of a 108 beaded mala, is considered sacred and often done during religious ceremonies. The recital is called namajapa. In this manuscript, we have discussed the significance of 108 in different fields.

## 2. Significance of 108

108 have vast number of applications in mathematics, religious, martial arts and other fields.

### 2.1. In Mathematics

The history of 108 number is used to communicate with internal energy of the body that gives communication to god. The number 108 may be the product of accurate mathematical procedure, which was assumed to have superior numerological

[^0]consequence. Powers of 1,2 and 3 in math: 1 to $1^{\text {st }}$ power $=1 ; 2$ to $2^{\text {nd }}$ power $=4(2 \times 2) ; 3$ to $3^{\text {rd }}$ power $=27(3 \times 3 \times 3)$. That is $1 \times 4 \times 27=108$. The prime factorizing of 108 is $2 \times 2 \times 3 \times 3 \times 3$. In mathematically this can be expressed as in different ways
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\begin{aligned}
& 108=2 \times 54 \\
& 108=2 \times 2 \times 27=4 \times 27 \\
& 108=2 \times 2 \times 3 \times 9=9 \times 12 \\
& 108=2 \times 3 \times 2 \times 9=6 \times 18 \\
& 108=3 \times 2 \times 2 \times 9=3 \times 36 \\
& 108=2 \times 2 \times 3 \times 3 \times 3
\end{aligned}
$$
\]

It is clear that, the number 108 in different ways, so that it finds the glories of 108 in different fields. Now here we explain each product can explain in different ways. In that $108=2 \times 54$ is explain by Sanskrit alphabet. There are 54 letters in the Sanskrit alphabet, each has macho and girlish, Shiva and Shakti. 54 times 2 are 108. Any mantra can formed by these 54 Sanskrit alphabet having 2 qualities Sri Yantra. On the Sri Yantra there are marmas, where three lines intersect and there are 54 such intersections [2]. Each intersection has macho and girlish, Shiva and Shakti qualities. Thus, there are 108 points that define the Sri Yantra as well as the human body.

### 2.2. $\quad$ Sri Chakra having $54 \times 2=108$

In astronomically, there are 27 constellations in our galaxy and each one has 4 directions and $27 \times 4=108$. In other words the number 108 covers the whole galaxy. That means 27 stars and 4 Padas total $27 \times 4=108$, this gives extrapolation of horoscope. There are 12 assemblages, and 9 arc divisions called namshas or chandrakalas. 9 times 12 equal 108. Chandra is moon and kalas are the divisions within a whole. There are 12 houses and 9 planets, 12 times 9 equal 108. The factors of 108 are $1,2,3,4,6,9,12,18,27,36,54$ and 108. In this, 1 is refers god, 2 denotes birth and death, 3 states time, 4 refers Vedas, 6 mention schakras in human body, 9 mention planets, 12 state months, 18 discusses Bhagavath Githa chapters, 27 denotes stars, 36 types of feelings, 54 Sanskrit alphabet and 108 is a holy number.

The mathematical or geographical suggestion proves that one circle has $360^{\circ}$ in space. Why is this circle or wheel of life considered to be of $360^{\circ}$ only?. If we take a circle and start dividing it using the four elements and three attributes, all the logic can be observed. The circle itself is considered the first element of space, since we must consume space in drawing a circle. In this space or circle, the four remaining elements and three attributes create the idea of time. The circle is divisible by the product of four essentials multiplied by three features. This includes the belief that the three features exist in the circle. By moving three times, each element completes its revolution. Thus $360^{\circ} \times 360^{\circ}=10,800$. Here zero is considered as Purnaor complete, so last zeros may be take out and are left with 108.

The idea of total universe is represented by this number of 108 . Offering 108 , devotees believe that they are showing eventual respect to the Supreme. A circle has $360^{\circ}$, which is multiplied by 60 gives 21,600 minutes in a circle. 60 comes from the 60 ghatis which Sanatana Dharma's believe in. One ghatis is equal to 24 minutes and 60 ghatis come to 24 hours. One ghatis is divided into 60 parts or palas. So the 60 ghatis multiplied by 60 palasa comes to 3,600 . This is further multiplied by 60 , which gives us 21,600 . Half of this is for the day and the other half for the night. So, 21,600 divided by 2 gives us 10,800 . For practical purposes, we use 108. Using the number 108, it helps us to coordinate the rhythm of time, space and remain
in harmony with the spiritual powers of nature [3]. According to Indian scriptures, letter 9 corresponds to Lord Brahma. Mathematically, the interesting property of 9 is

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\begin{aligned}
9 \times 1 & =9 \\
9 \times 2 & =18(8+1=9) \\
9 \times 3 & =27(7+2=9) \\
9 \times 12 & =108(1+0+8=9)
\end{aligned}
$$

The number 108 is divided, such as in half, third, quarter or twelfth. So that some malas have $54,36,27$ or 9 beads. In Pythagorean, nine is the limit of all numbers, all others existing and coming from the same. i.e. 0 to 9 is all one needs to make up an infinite amount of numbers.

### 2.3. Religions

Admirers use 108 beads in their malas. They contrivance the following formula: $6 \times 3 \times 2 \times 3=108$. Here, it represents 6 senses (sight, sound, smell, taste, touch, thought), 3 aspects of time (past, present, future), 2 conditions of heart (pure or impure) and 3 possibilities of sentiment (like, dislike, indifference). All Buddhists accept the Buddha footprint with its 108 favourable illustrations [4]. These areas are considered to have been marked on the Buddha's left foot when his body was discovered 108 beads on the Hindu maalaa, 108 Arhats or Holy ones, 108 Gopis of Lord Krishna, 108 Holy places for Vaishnavas, 108 Upanishads, 108 Divyadeshes-Divine or Sacred Tirtha throughout India and Nepal, 108 sacred water taps in Muktinath-Nepal.

Vedas treats the sun as god and sun has 12 signs. In Yajurveda, the sun is related with Lord Brahma, remember $12 \times 9=108$; therefore for recitation of the mantra or prayer the number 108 is very sacred. According to Indian mythology, there are also 4 Yugas Satya Yuga-consists of 172,800 years $(1+7+2+8=18=(1+8=9)$, Treta Yuga consists of 1296000 years $(1+2+9+6=18=(1+8=9)$, Dwapara Yuga comprises of 864000 years $(8+4+6)=18=(1+8=9)$, Kaliyuga consists of 432000 years $(4+3+2)=9$.

The mala of 108 beads also represents Krishna, as the head bead and his 108 most confidential servants. So you chant on all the beads except the Krishna bead, which you turn the mala around and chant the other ways for another round of 108 times of chanting. It can also represent the 108 most important of the Upanishads. In Islam, the number 108 is used in Islam to refer to god. In Jain religion, 108 are the combined virtues of five categories of holy ones, including $12,8,36,25$ and 27 virtues respectively. In Sikh, it has a mala of 108 knots tied in a string of wool, rather than beads.

### 2.4. Other Importance of 108

Marmas: Marmas or marmastanas are like energy connections called chakras, except have fewer energy lines congregating to form them. There are said to be 108 marmas in the subtle body. Time: Some say there are 108 feelings, with 36 related to the past, 36 related to the present and 36 related to the future.

Sun and Earth: The diameter of the sun is 108 times the diameter of the Earth. There are 108 forms of dance in the Indian traditions. Interestingly, there are about 115 elements known on the periodic table of the elements. Most of those, around or higher than the number 100 only exist in the laboratory and some for only thousandths of a second. The number
that naturally exists on Earth is around 100. The average distance of the Moon from the Earth is 108 times the diameter of the Moon. In astrology, the metal silver is said to represent the moon. The chakras are the intersections of energy lines and there are said to be a total of 108 energy lines converging to form the heart chakra. One of them, subhuman leads to the crown chakra and is said to be the path to Self-realization. Tantric estimates the average number of breaths per day at 21, 600 , of which 10,800 are solar energy and 10,800 are lunar energy. Multiplying 108 by 100 is 10,800 . Multiplying $2 \times 10$, 800 equals 21, 600.The first manned space flight lasted 108 minutes and was on April 12, 1961 by Yuri Gagarin, a Soviet cosmonaut. The 1 of 108 and the 8 of 108 , when added together equals 9 , which is the number of the numerical scale, i.e. $1,2,3 \ldots, 10$, etc., where 0 is not a number [5].

## 3. Conclusion

One hundred eight (108) is a plentiful number and a semi-perfect number. In astrology, the metal silver is said to represent the moon. The chakras are the intersections of energy lines and there are said to be a total of 108 energy lines converging to form the heart chakra. One of them, subhuman leads to the crown chakra and is said to be the path to Self-realization. There are 108 points that define the Sri Yantra as well as the human body. The history of 108 number is used to communicate with internal energy of the body that gives communication to god.In the Manga and Anime series Shikabane Hime Aka and Shikabane Hime Kuro, Corpse Princess, the shikabane himes must hunt 108 evil undead corpses in order to ascend to heaven.

## References

[1] D.Wells, The Penguin Dictionary of Curious and Interesting Numbers, Penguin Group, London, (1987).
[2] C.Michael, The Way of the Warrior: The Paradox of the Martial Arts, New York, (1991).
[3] A.W.Samael, The Pistis Sophia Unveiled, Glorian Publishing, (2005).
[4] Leung, Shum and Jeanne Chin, The Secrets of Eagle Claw Kung Fu: Ying Jow Pai, Tuttle Pub, Boston, (2001).
[5] P.Subramaniam, S.Hikosaka, G.John Samuel and M.Radhika, A Tamil Text on Martial Art from Palm-Leaf Manuscript, Institute of Asian Studies, Madras, (1994).


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