



### From the Editor's desk...

I have always been passionate about Maths and therefore the interest in numbers. In one of the school projects that I visited, each class had been given a number and asked to do a project around it. This was many years ago. The creative exploration of the children fascinated me and stuck in my mind. This is the genesis for this special issue of Scribbles on 'The Power of Numbers'.

We see numbers all around us – whether at work or at home or in a public place. We take these numbers for granted. Numbers have meanings, they have a life and there is logic behind the evolution and combination of numbers. Such a vast subject cannot be condensed in one issue. We would at least need a dozen. We have made a beginning...

Starting from 0 to 9, one number was allotted to a particular Sanmar location and this issue is rather a 'product' of the individual 'numbers', with lots of additions, subtractions, multiplications and divisions by way of editorial inputs, design and layout.

- 0 Delhi and other Eastern regional offices (Poseidon)
- 1 Mumbai, Baroda and other Western regional offices (Zeus)
- 2 Karaikal and Vedaranyam (Socrates)
- 3 Cuddalore and Panruti (Socrates)
- 4 SFL, Viralimalai (Nyx)
- 5 SETL, Viralimalai (Rhea)
- 6 SETL, Karapakkam (Midas)
- 7 SSCL, Berigai (Apollo)
- 8 Mettur plants (Atlas)
- 9 Head office (Apollo)



What makes this issue an interesting read is the diverse range of articles covered – from numbers in exotic nature to the beauty in the patterns of numbers, from Chinese culture to Panchaloha, from Vedas to 3D technology, from Gandhiji's 3 monkeys to Maggie 2 minute noodles, and a 'duck' in cricket...

Wishing you the best of health and happiness in 2015.

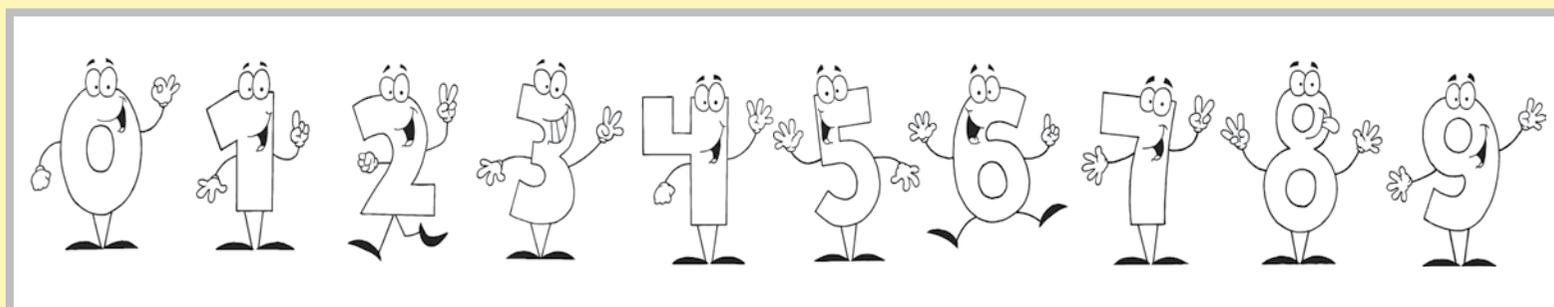
I guess, the number game has begun yet again.

Best wishes,

*Ananda Jagan*

*A special thanks to PR Somaskandan for helping us in coordinating with locations and putting this issue together.*  
- Editorial Team

## SPECIAL ISSUE: THE POWER OF NUMBERS



## The Magical Number

According to me, Nine is the most powerful number. It is both magical and mystical. Magical because of the property acquired by the resulting figure when a number is added with or multiplied by 9. The sum total of the digits in a number remains the same, when added with 9. Though this property is similar to numeral 0, the resulting number does not remain the same but changes when dealing with 9. Yet the sum of the digits in the resulting figure remains the same as that of the original number



being added with 9. For e.g., let us take 41. Sum of digits is  $(4+1)=5$ . Now  $(41+9)=50$  whose digits' sum is  $(5+0)=5$ .

In case of multiplication, the sum total of the digits in a number becomes 9 when multiplied by 9. This is irrespective of the number of digits in the initial number taken. Thus,  $(41 \times 9)=369$  whose digits' sum is  $(3+6+9)=18$  which in turn will be  $(1+8)=9$ . Wonderful, isn't it? Here again, unlike the numeral '0', which when multiplied transforms the whole number to itself (zero), in case of 9, we get a resultant number whose digits in turn add up to itself (nine).

## 9 in Indian mythology

Some of the connections you would recall immediately are – Navarathri, Nava Durga, Nava Grihas, Nava Bhashanas, Nava Theerthas, Nava Tirupathi (around Tirunelveli and Kumbakonam, both in Tamil Nadu), Nava Dwaras (the 9 doors to the human body), Navamsa (in horoscope), Nav Ratan (9 gems), Nava Nidhi (9 types of wealth), Nava Dhanyam (9 types of cereals/pulses), Navarasa (9 moods), Nava Mukha Rudraksha (9-faced Rudraksha whose presiding deity is Lord Bhairava).



Add to this list, a host of things in the Hindu religion which are multiples of 9 like – 18 Chapters of Bhagavat Gita, 18 days of Kurukshetra (Mahabharatha) war, 18 steps at the Holy shrine of Sabarimala, 27 Nakshatras/

stars, 27 Gandharvas, 63 Nayanmars (devotees of Lord Shiva), 108 Divya Kshetras (Holy places for Vaishnavites), 108 counts of Mantras, 108 Archanas (called Satha Naamavali), 1008 Archanas (called Sahasra Naamavali).

Please note that all the above numbers too add up to 9. The Sanskrit/ Hindi word for 9 is 'Nav' which also means 'New'.

**P R Somaskandan**, *Internal Audit, Sanmar Corporate Divn.*

## Fun with number 9

Enjoy the arrangement of numbers in the series of divisions below:

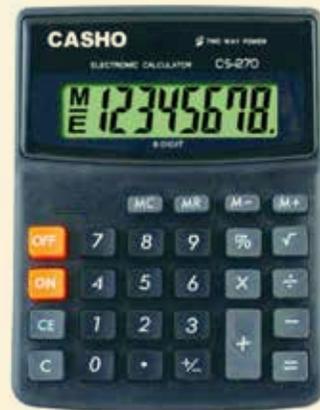
12345678987654321	/	999999999	=	12345679
123456787654321	/	9999999	=	12345680
1234567654321	/	99999	=	12345800
12345654321	/	999.99	=	12345778
123454321	/	9.9999	=	12345556
1234321	/	0.09999	=	12344444
12321	/	0.000999	=	12333333
121	/	0.000099	=	1222222
1	/	0.0000009	=	1111111

I am sure you will agree with me that number 9 is really mind-boggling.

**S Ramalakshmi**, *D/o P R Somaskandan, Internal Audit, Sanmar Corporate Divn.*

## Amazing Nine

- Any random number (e.g 35967930) when arranged with its integers in a descending order (i.e. 99765330) and subtracted from the number in its reverse order with rearranged integers in an ascending order (i.e. 03356799) the resulting figures (i.e. 96408531) individual integers when added (i.e. 36) will be a multiple of number 9.



Just try the below numbers and see the magic 10,210,6543210,76543210.

- On a numeric keypad or calculator, the numbers from left to right and top to bottom are 789-row-1 | 456-row-2 | 123 - row 3.

If you add up the totals of each row you get... row-1 is  $(7+8+9)=24$ , row-2 is  $(4+5+6)=15$ , row-3 is  $(1+2+3)=6$  the difference between each sum is 9.  $(24-15=9$  or  $15-6=9)$ .

- The sum of the digits of the number added to 9 is always equal to the sum of the digits of the result. Take any four digit number and try the trick. Ex:  $(9+17)=26$ .  $(1+7)=8$  &  $(2+6)=8$ .



- The earth rotates 15 degrees per hour through 24 different time zones, 1 per hour.  $(24-15)=9$ .  $(24 \times 15)=360$  or a full rotation.
- A 9-sided polygon is called a enneagon.

**R Sangeetha**, *Accounts, Sanmar Corporate Divn.*

## Ashtalakshmi temple



Ashtalakshmi temple lies on the shorelines near the Elliot's beach, in Chennai, India. The word Ashta means eight. The eight Lakshmis give eight kinds of benefits namely, offspring, success, prosperity, wealth, courage, bravery, food and knowledge. The temple is dedicated to the goddess Lakshmi and her eight primary forms.

**V Gomathi, W/o V Subramanian, Plant Services, Chemplast.**

## Eight facts!

- $9 \times 0 + 8 = 8$
- $9 \times 9 + 7 = 88$
- $9 \times 98 + 6 = 888$
- $9 \times 987 + 5 = 8888$
- $9 \times 9876 + 4 = 88888$
- $9 \times 98765 + 3 = 888888$
- $9 \times 987654 + 2 = 8888888$
- $9 \times 9876543 + 1 = 88888888$
- $9 \times 98765432 + 0 = 888888888$

**A Gopikaa, XIth Std, D/o. I Anandakrishnan, Production, Chemplast.**

## Lady 8

- According to me, 8 indicates the feminine character. In comparison to the numeric number 8, as a girl grows she bends according to the lifestyle and crosses the thin line in middle of her life



has she moves into the second part of her life (marriage).

- In R.T.O. Office (Regional Transport Office),

while giving two wheeler licence, the licensee has to drive the vehicle in the numeric 8 direction.

- Sashtanga Namaskar - performed with the entire body stretched face down with all the eight limbs flat on the floor. It is not only a mark of respect but signifies total surrender.



**Revathi Sriram, W/o R Sriram, Support Services, Chemplast.**

## 8 shape walking

My grandfather used to demonstrate shape 8 walking in a simple way to be brisk and energetic.

*What is 8 shape walking?*

Siddhars, our great forefathers have described our body as temple of God. It is better to keep our body physically fit and brisk, free from diseases rather than looking after our body with medicine.

8 shape walking is an exercise, which is an ancient secret of siddha health maintenance, which helps us avoid and manage chronic diseases such as high blood pressure, diabetes, high cholesterol, heart diseases and kidney problems. This can be done by any normal healthy person. Children can do this exercise under the supervision of an adult.



*How should the 8 shape health walk program be done?*

The 8 shape walking exercise can be done as part of daily exercise and does not need any special preparation or any other exercise equipment. It

can be done along with specific pranayama and breathing patterns for focused and long lasting health benefits.

*When should it be done?*

It is highly beneficial when done on an empty stomach for 15 to 30 minutes before breakfast early in the morning between 5.00 am & 8.00 am preferably in open air like a play ground, an open terrace, a park.

### Procedure

Draw two parallel lines in east-west direction 10 feet apart from each other. Then draw number 8 between the lines. Start walking on the 8 for about 15 minutes from south to north or north to south with normal breathing. After 15 minutes of walking, you will feel refreshed. You can stop with this. If possible, repeat the same for another 15 minutes.

**K B Manoharan, Projects, Cabot Sanmar. &**

**A Muthu Vijayan, Personnel, Chemplast.**



I have 8 legs too!



1. Perfectly neutral PH 7 water.
2. Seven hills of Tirupathi.
3. Seven muses.
4. Seven musical rhythm.
5. Seven wonders of the world.
6. Seven continents.
7. Seven days in a week.
8. Seven colours in rainbow.

**R Subramaniam**, *SHE, SSCL.*

### Seven - Plus and Minus

7 isn't just a lucky number. It's also spiritual, intelligent, analytical, focused, introspective, studious, intuitive, knowledgeable, contemplative, serious, persevering, refined, gracious and displays much inner wisdom.

Based on numerology 7s, can be aloof, distant, sarcastic, socially awkward, melancholic, cowardly and, when they're at their worst, back-stabbers.



### 7 - here, there, everywhere

In school we learnt that a rainbow has 7 colours, we have read about Snow White and the 7 dwarfs, the 7 wonders of the world, and the world's most popular spy James Bond 007. When Ian Fleming was looking for a code for James Bond, he didn't go for 006 or 008 only 007 had right ring. Shakespeare described the seven stages of man, and Sindbad the sailor went on seven voyages.

Look around you and the number 7 is obvious everywhere as well as hidden in mysterious ways. We all know that a week has 7 days, but did you know that each relates to 7 Gods? What about the fact that the entire musical scale consists of only seven notes? Or that most ladybugs have 7 spots on their wings. There is more to the number 7 than meets the eye. Jackpot number is 777. Air bus Boeing number is 777. 7 also sells 7-up, 7-O clock blades.

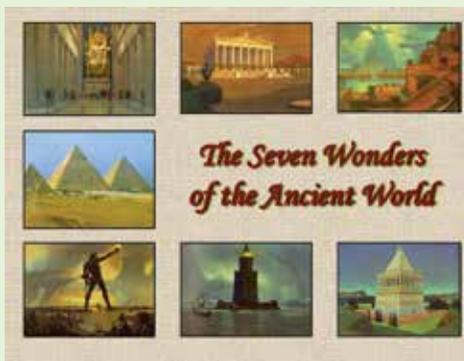
The simple digit that expressed with one rightward and one downward stroke the numeral 7 is deceptively alluring. It has spiritual connotations in the major religions. When St. Peter asked Jesus Christ, "How many times do we forgive others? Up to seven times?" He replied we are to forgive others "seventy times seven".

**E Arputha Raj**, *Production, SSCL.*



### My favourite number

- Psychologists see evidence of our affinity with seven, time and again and now comes further statistical proof from mathematician Alex Bellos in his new book *Alex Through The Looking Glass*. He asked 44,000 people to name their favourite number and a 10th of them answered seven. He claims this shows that even those with no interest in maths are subconsciously doing a kind of mental arithmetic.

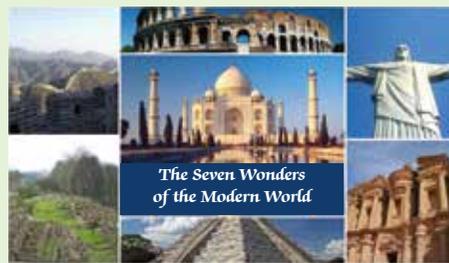


- The optimum number of hours of sleep for humans is seven. A study by the West Virginia Medical School in the US of more than 30,000 adults

found that the risk of developing heart disease increased in those who sleep one hour more or less than seven.

- Isaac Newton originally divided the spectrum into five main colours – red, yellow, green, blue and violet – in 1672 but later added orange and indigo to make it seven. In concurrence with the Ancient Greeks he believed there was a connection between the number of colours in the spectrum and the number of days in the week, the

number of notes in a musical scale and the number of objects known in the solar system.



- Number seven is one of the most significant numbers in the Bible. Scholars say it denotes completeness or perfection. After creating the world, God rested on the seventh day and the seven-day week has been adopted by all human civilisations.
- The ancient world had seven wonders: the Great Pyramid of Giza, the Hanging Gardens of Babylon, the Temple of Artemis at Ephesus (now in Turkey) the Statue of Zeus at Olympia, the Mausoleum at Halicarnassus, the Colossus of Rhodes and finally the Lighthouse of Alexandria. The Seven Wonders of the Modern World are: the Great Wall of China, the Taj Mahal in India, the Rock City of Petra in Jordan, the statue of Christ the Redeemer in Rio de Janeiro, Machu Picchu in Peru, the Chichen Itza pyramid in Mexico and the Colosseum in Rome. The list was chosen by global ballot and the results were announced on the seventh day of the seventh month (July 7) in 2007.

**P Karthikeyan**, *Quality Assurance, SSCL.*

## Speciality of multiples of “6”

6	x	1	6	6 + 0	6
6	x	2	12	1 + 2	3
6	x	3	18	1 + 8	9
6	x	4	24	2 + 4	6
6	x	5	30	3 + 0	3
6	x	6	36	3 + 6	9
6	x	7	42	4 + 2	6
6	x	8	48	4 + 8 = 12	1 + 2 = 3
6	x	9	54	5 + 4	9
6	x	10	60	6 + 0	6
6	x	11	66	6 + 6 = 12	1 + 2 = 3
6	x	12	72	7 + 2	9

**S Subramaniam**, SRSTI, Sanmar Corporate Divn.

## No. 6 in Chinese culture

Chinese take 六 six as a fortunate number mainly meaning smooth or well off. In Chinese, 六六六六 means that everything is going smoothly. In choosing the telephone numbers and the vehicle identification numbers, people often prefer a number including 6. Besides, there is also an interesting tradition about 6 in some areas of China: when a man wants to marry a girl, he has to present a betrothal gift to the girl's family. The gift is usually money: CNY 6,666 or CNY 66,666. People consider that the money given in such denominator will help bless the new couple with a harmonious and happy life. When a person comes across his or her 66th birthday, it is celebrated grandly, as Chinese hold a generally accepted opinion that if a person lives up to 66 years, he is deemed to be longevous.

Additionally, 6 has a wide use in Chinese history. For example, Chinese classical six arts refer to etiquette, music, archery, riding, writing, and mathematics. Six kinfolds refer to father, mother, brother, sister, wife and children.



## King six

- Arusuvai food
- Sixer – cricket
- Arupadai veedu – six holy places of Lord Muruga
- 6 pooja time in temples
- 6 working days in a week
- 6 am to 6 pm - very common usage for working round the clock
- 6th sense in humans
- 6 sigma - quality
- 6th finger – a lucky sign
- 6 faces of a cube
- 6 strings of a standard guitar
- Most insects have 6 legs
- The cells of a beehive are 6 sided.
- The standard term in



office for United States Senator is 6 years

- 6 pack which youngsters long for...!

**V Anand**, Std. XII  
S/o **V Vaidhyanathan**,  
Personnel, BS&B Safety Systems.



**Sixth sense**, or subtle perception ability, is our ability to perceive the subtle-dimension or the unseen world of angels, ghosts, heaven (swarga), etc. It also includes our ability to understand the subtle cause and effect relationship behind many events, which is beyond the understanding of the intellect.



## Six in space

The universe is sometimes described as emanating in six directions: from a central point - north, south, east, west, up and down. All physical space and all physical objects have these six dimensions. Six represents completion, because something that is surrounded on all six sides is complete.

## Six Sigma

Six Sigma in many organisations simply means a measure of quality that strives for near perfection. Six Sigma is a disciplined, data-driven approach and methodology for eliminating defects (driving toward six standard deviations between the mean and the nearest specification limit) in any process – from manufacturing to transactional and from product to service.

## Olympic rings

Popular myth has it that the rings were inspired by a similar, ancient design found on a stone at Delphi, Greece. This “ancient” design, however, is really just a modern prop. For the 1936 Summer Games in Berlin, Carl Diem, President of the organising committee, wanted to relay the Olympic Flame from its lighting point in Olympia to the Olympic stadium in Berlin. Diem, it seems, had a flair for theatrics, and included in the relay a stop at Delphi’s ancient stadium for a faux-ancient Greek torchbearers’ ceremony complete with a faux-ancient, three-foot-tall stone altar with the modern ring design chiseled into its sides. After the ceremony, the torch runners went on their way, but no one ever removed the stone from the stadium. Two decades later, British researchers visiting Delphi noticed the ring design on the stone. They concluded that the stone was an ancient altar, and thought the ring design had been used in ancient Greece and now formed “a link between ancient and modern Olympics.” The real story behind the altar was later revealed and “Carl Diem’s Stone” was moved from the stadium and placed near the ticketed entrance to the historic site.



**P Sankara Kuthalam**, *Sub contract, Tyco Sanmar.*

## Unity in diversity



Look at your five fingers of a stretched hand. The fingers all are of different lengths. Now you fold your fingers into your palm and have you noticed all the fingers line up nearly as a straight-line. This is what “Team Spirit” is all about - unity in diversity!

**G Muralidharan**, *Business Manager's Office, Tyco Sanmar.*

## 5 Oceans

☞ Pacific Ocean ☞ Atlantic Ocean ☞ Indian Ocean  
☞ Arctic Ocean ☞ Antartica Ocean



- In numerology, number 5 denotes planet mercury. If you take daring risks, consider nothing as impossible, you are ruled by number 5 and mercury.
- 5S - We are using this tool to maintain a clean atmosphere.
- 5 is the most common number of gears for automobiles with manual transmission.
- 5 is the third prime number in mathematics.

**N Magesh**, *Product Engineering, Xomox Sanmar.*

## Panchaloha

Panchaloha is a term for traditional five-metal alloys of sacred significance used for making idols (Murti). The composition is laid down in the Shilpa shastras, an ancient Sanskrit text on idol making. It is traditionally described as an alloy of gold, silver, copper, iron and lead as the major constituent. Instead of lead, some use tin or zinc. Because of the cost, gold and silver are now omitted from the manufacture of general-purpose idols, instead copper, brass, and lead in the ratio 29:2:1 are used.



It’s widely believed, wearing a jewellery made of Panchaloha/ Panchdhatu brings balance in life, self-confidence, good health, fortune, prosperity and peace of mind. The secret of wearing this jewellery is that it provides balance in totality i.e., balance of life-force (prana sakthi), and thus provides nutrient and energy to the wearers. These metals also complement various gem stones which are used alongside.

**P Sudharson**, *Engineer, Tyco Sanmar.*

## World Environment Day

Every year 5th June is celebrated as World Environment Day globally, a day to come together for a cleaner, greener and brighter outlook of the environment for ourselves and future generations. World Environment Day celebration began in 1972 and has grown to become one of the main vehicles through which the UN stimulates worldwide awareness on environment and encourages political attention and action. Through World Environment Day, the UN Environment Programme is able to personalise environmental issues and enables everyone to realise not only their responsibility, but also their power to become agents of change in support of sustainable and equitable development.



**S Sankaran**, *Quality, Xomox Sanmar.*

## Pancha Pandavas in Mahabharatha

- Yudhistra
- Bheema
- Arjuna
- Nakula
- Sahadeva



## Jai Maruthi

He who was born to one of five (Air)  
He who jumped across one of five (Ocean)  
He who flew for his lord through one of five (Sky)  
He who met the daughter of one of five (Earth)  
He who gifted the enemy with one of five (Fire)  
Will guide us through his grace and give us faith to be safe.



**A Rajaraman**, *Customer Support, Xomox Sanmar.*

## 4's in math equation

4's can be used in any manner and in any mathematical operation to write equations that have the numbers from 0 to 100 as the answer.

### Example

$$44 - 44 = 0$$

$$(4 - 4) * 4 + 4 = 4$$

$$(44 - 4) / 4 = 10$$

$$(4 * 4) + 4 + 4 = 24$$

$$44 - (4 / 4) = 43$$

$$((4! + \text{Sq Root } 4) / .4) - 4 = 61$$

$$(4 * 4 * 4) + (\text{Sq Root } 4) = 66$$

$$(44 * \text{Sq Root } 4) + 4 = 92$$

$$44 / .44 = 100$$

**S R Sakthivel**, S/o **K S Rajendra Kumar**, Operations, SFL.

## Four's presence

- Vedas [Rig/ Yajur/ Sama/ Atharvana]
- 4 Directions [North/ East/ West/ South]
- There is a tamil usage "Naalum Therindavan" meaning one who knows it all.
- American Independence Day July 4



- Sanmar Viralimalai's Factory Day is on July 4
- Four legs of a furniture "Narkali"
- 27 tamil stars with only 4 – Padams
- To save property for four decades - "Naalu Thalaimuraikku".

**R Sukumar**, Personnel, SFL.

## Four letter words

- NEWS - Information from 4 sides - North, East, West, South becomes news.
- LOVE - We should learn to love all living beings.
- BEST - Only the best will be picked up in any field, so be the best.
- BEND - Bending right for things leads you to win.
- GOOD - Everybody likes being good.
- Most parts of our body are in four letters like HEAD, EYES, NOSE, EARS, LIPS, NECK, LEGS, FEET.



**E Pasupathi**, Production, SFL.

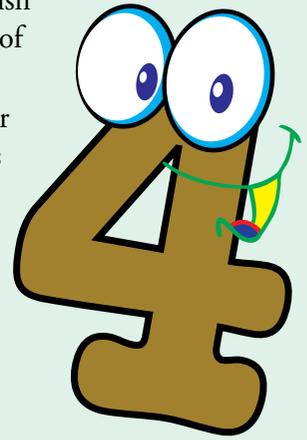
## The fours...

1. Four things for success: work, pray, think and believe.
2. Research is four things: Brain to think, eyes to see, machines to work & the fourth is money.
3. To achieve success ask yourself these four questions: Why? Why not? Why not me? Why not now?
4. Medicine rests upon four pillars – Philosophy, Astronomy, Alchemy & Ethics.

**G N Raghu Raman**, Production. SFL.

## Fun with facts of number – 4

- ☞ Four is the only number in English that is equal to the number of letters in its name. 4 = four.
- ☞ If you multiply the number 21978 by four, it turns backwards – 87912.
- ☞ Four rocky planets in our solar system – Mercury, Venus, Earth, Mars.
- ☞ Four giant gas planets in the solar system – Jupiter, Saturn, Uranus, Neptune.
- ☞ Four of the Jupiter's moon are (The Galilean Moons) visible from earth.
- ☞ The mammalian heart consists of four chambers.
- ☞ All insects with wings (except flies) have four wings.
- ☞ In chemistry the valency of carbon (that is basis of life on the earth) is four.
- ☞ Four is the number of strings on a violin, a viola, a cello, double bass, a cuatro and a ukulele, and the number of string pairs on a mandolin.
- ☞ Four estates: Politics, Administration, Judiciary, Journalism.
- ☞ Four corner is the only location in the United States where four states come together at a single point: Colorado, Utah, New Mexico and Arizona.
- ☞ The BEATLES were also known as the "Fab four": John Lennon, Ringo Starr, George Harrison, Paul McCartney.
- ☞ There are also four years between two Olympic games, FIFA World Cup, Cricket World cup, FIBA world Championships, Asian Games, Common wealth Games, Rugby World Cup.



**S R Aishwarya**, D/o **K S Rajendra Kumar**, Operations, SFL.

## 2+2 = 2 x 2 = 4 = Tetra = Quadra = Four

- As a cricket lover, the first thing, which strikes me about the number 4, is the boundary (FOUR) scored by a batsman bringing lot of jubilation among the spectators in the ground. Also a double hat-trick is referred to as taking four wickets in four balls.
- The four rules in mathematics are addition, subtraction, multiplication and division.
- The four basic states of matter are solid, liquid, gas and plasma.
- The four seasons are spring, autumn, summer and winter.
- Four suits of playing cards are hearts, diamonds, clubs and spades.
- The four-colour process (CMYK) is used for printing.



**S Dinesh Babu**, Industrial Engineering, SFL.

## Three means all

- In the Buddhist tradition the theme of 3 is represented by the tri-ratna, the three precious jewels, and the Buddha, Dharma, Sangha.
- In Chinese '3' is sanctity, the auspicious number; the first odd, yang number... The moon toad, or bird, is three-legged.
- In Christianity three represents the Trinity - the Father, the Son and the Holy Spirit.
- In Hinduism the Trimurti represent Brahma, Vishu, Siva; the triple power of creation, destruction and preservation.
- In Japanese, the three treasures are mirror, sword and jewel - that being truth, courage and compassion.



**S Viswanathan**, *SHE, Chemplast.*

## Power of number 3

Significance of "3 knots" at the time of "Mangalya dharana". The first knot represents the unity amid the husband and wife, the second symbolises the unification between families and the third one normally tied by the sister-in-law is the reciprocal commitment and assurance from the boy's side to the girl's prosperity and well being.

**S Subramanian**, *Mechanical Maintenance, Chemplast.*

## Number 3 in sports

Internationally, numbers of medals or rank in any sports event are three, i.e. Gold, Silver and Bronze.

**CSR Kamrudeen**, *Civil, Chemplast.*

## The unsung heroes of construction – The humble triangle

The triangle is the only two dimensional polygon that is fixed in shape. A square, for example, can easily be altered into a parallelogram. When a force is applied to a triangle, there is no change. One of the famous architectural wonders is the "golf ball" at EPCOT in Walt Disney World. A closer look will reveal that the strength of the structure is achieved using a myriad of small triangles. The most important, and the most under appreciated; the humble triangle gives strength to scaffolding and creates the curves of some of London's most iconic buildings. Not only in macro levels, triangles also give strength to micro levels. The carbon atoms in diamond are arranged in the form of tetrahedron (a pyramid made out of four equilateral triangles). This is why diamonds are so hard.

**W Jesulin Edberg**,  
*Instrumentation, Chemplast.*



## The secret behind 3D

3D stands for the three-dimensional technology that offers a wide array of possibility in the future in almost every walk of life and especially in entertainment segment.



It was first introduced in movies and now it is even present in mobiles. A 3D film viewed without glasses is a very strange sight and may appear to be out of focus, fuzzy or out of register. The same scene is projected simultaneously from two different angles in two different colors, red and cyan (blue or green). Here is where those cool glasses come in, the coloured filters separate the two different images so each image only enters one eye. Your brain puts the two pictures back together and now you're trying to dodge the rocket that comes nearer to you on screen.

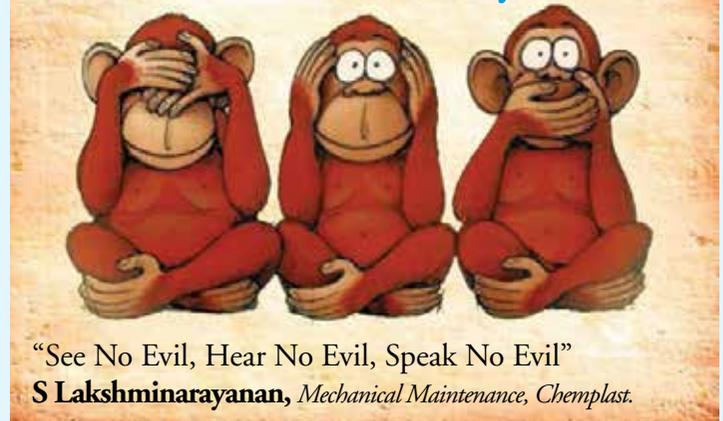
**M Ponnusamy**, *Production, Chemplast.* &  
**W Jesulin Edberg**, *Instrumentation, Chemplast.*

## 3 in mathematics

- Is the only number whose sum with those lesser than it equals to the product of the numbers ( $1+2+3=1 \times 2 \times 3$ ).
- Is the smallest number of sides that a simple polygon has - Triangle.
- Is the smallest number that can be meant as "Many" (one, two and many).
- 3 in Religion: The number Three is sacred in religions.
- There were three rulers in Greek mythology – Zeus, Poseidon, Hades.
- Three ethical principles of Zoroastrians – Humata- to think good, Hukhta- to speak good, Huveshta- to act good.
- 'Three thumb rules' by Elbert Hubbard. To escape from criticism, do nothing, say nothing, be nothing.

**A Arivudai Nambi**, *Mechanical Maintenance, Chemplast.*

## Mahatma's three monkeys

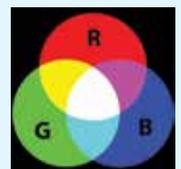


"See No Evil, Hear No Evil, Speak No Evil"

**S Lakshminarayanan**, *Mechanical Maintenance, Chemplast.*

## Interesting facts

- Nobel Peace Prize - On the medal is engraved a picture of three naked men. The medal was designed by Gustav Vigeland.
- Primary colours - Only three primary colours are needed to mix most other colours; red, green and blue.
- Animals - The octopus has three hearts. Camels have three eyelids. Cats have a third eyelid, called the haw.



**C Sridhar**, *Quality, Chemplast.*

## Prime number 2

- Two is the smallest and the first prime number, and the only even prime number.
- Powers of two are central to the concept of Mersenne primes, and important to computer science. Two is the first Mersenne prime exponent.
- Taking the square root of a number is such a common mathematical operation, that the spot on the root sign where the exponent would normally be written for cubic roots and other such roots, is left blank for square roots, as it is considered tacit.
- The square root of 2 was the first known irrational number.
- Essentially, the number two speaks to the fundamental duality that is so much a part of life. Day/Night. Good/ Evil. Man/Woman. Light/Darkness. Plus/Minus. Hot/ Cold.
- The Parliament of India consists of two houses: The Lok Sabha (House of the People) and the Rajya Sabha (Council of States).



**A Sivalingam**, *Electrical Maintenance, Chemplast.*

## A binary wonder

- ♦ In astronomy - A binary star is a stellar system consisting two stars orbiting around their centre of mass.
- ♦ The Roman numeral II stands for bright giant in the Yerkes spectral classification scheme.
- ♦ In technology - The resin identification code is used in recycling to identify high-density polyethylene.



**L John Anand Antony**, *Production, Chemplast.*

## Takes only 2 minutes to cook



## Number 2 in Chinese culture

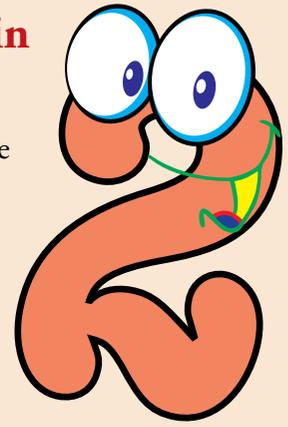
Two is an auspicious number in Chinese culture, because Chinese people believe that 'good things come in pairs'. According to their ancient customs for wedding ceremonies, people decorate gates and windows with paper-cuts. There are many congratulatory and complimentary phrases. For instance, 'bi yi shuang fei' (shuang meaning double), meaning flying wing to wing, best wishes; remain devoted couple till the end. 'Cai mao shuang quan' is used to describe a person who is pretty and talented.

Two has another interesting use of dialects in different places of China, but mostly negative. In Shaanxi province, two pronounced 'Er' in Chinese is used as an adjective to ironically describe those who are intemperate, reckless or intrepid.

**C Jayachandran**, *Production, Chemplast.*

## "Good things come in pairs"

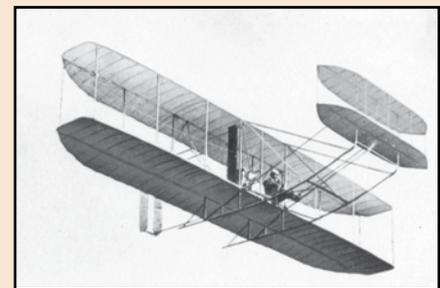
- Two is a lucky number in the Far East.
- Two is the number of balance, but also the number of conflict and opposition.
- Without the number two, the positive and negative cannot exist.
- Two is also the number of division.



**K Soundararajan**, *Operations, Chemplast.*

## For partnerships

Two symbolises partnership. Many scientific researches led to great inventions as they were done by two - Wright brothers, Curie couples, etc.



Psychologists say when a project is lead by two optimistic people

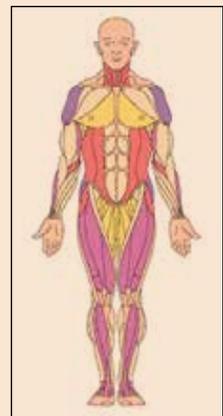
with same frequencies their result is wonderful and appreciable. In their field, they help each other and their self-confidence increases tremendously, which leads to better results.



We have both upper and lower teeth and we need them both. Having just one of the two is of no help.

**S Manavalan**, *Production, Chemplast.*

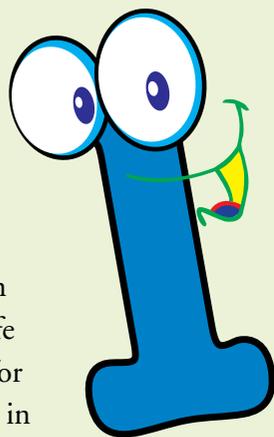
If you look at the way the human bodies are constructed, on each side of the torso is an arm and leg. Two arms, and two hands, and two legs with two feet are attached to the central core. Even



internally, most of the organs come in twos: the lungs, kidneys, and the inner chambers of the heart and the brain on two sides. The head has two eyes, ears, and nostrils.

## One for power

- 1 is the symbol of beginning, symbol of success, symbol of auspiciousness, symbol of respect.
- 1 is not just a number; it has the capacity to change lives. When 1 gets attached with anyone's life it brings drastic change like for example 1st rank in exam, 1st in race, 1st in class etc. They are termed achievers!
- People make history when they invent the 1st of any thing like telephone, computer, etc.
- One will be respected when he secures the 1st position or the highest level in any field. 1st astronaut in space, 1st lady president and many more. It seems that 1 is always a magical number.
- A baby's 1st touch, 1st word, 1st walk, 1st day in school are just incredible moments of one's life.
- Multiplication or division of any number with 1 gives the same number.



We need to be stable like "1" in every situation in our lives: be it multiplication of happiness or division of our sorrows and disappointments.

**Jelam Vazir**, Sister of **Parth Bhavsar**, Sales, Xomox Sanmar, Surat.



## An ode to one

To realise the value of ONE YEAR,  
Ask a student who failed a grade.

To realise the value of ONE MONTH,  
Ask a mother who gave birth to a pre-mature baby.

To realise the value of ONE DAY,  
Ask the editor of a daily newspaper.

To realise the value of ONE HOUR,  
Ask the lovers who are waiting to meet.

To realise the value of ONE MINUTE,  
Ask a person who missed the train.

To realise the value of ONE SECOND,  
Ask a person who just avoided an accident.

To realise the value of ONE MILLISECOND,  
Ask the person who won a silver medal in the Olympics.

The clock is ticking.  
Make the most of today.

**Jainesh Shah**, Sales, BS&B Safety Systems, Vadodara.



Contributed by **Dangar Prabhat Ranabhai**, Customer Service, Sanmar Engg. Services, Jamnagar.

## Symbolic meaning of No.1

Number One primarily deals with strong will, positivity and pure energy. One reflects new beginnings and purity. 1 (one is also called "unity" or, in technical contexts, "monad") is a number, a numeral, and the name of the glyph representing that number. It represents a single entity, the unit of measurement. For example, a line segment of "unit length" is a line segment of length 1.

One is its own factorial, its own square, its own cube, and so on. One is also the empty product, as any number multiplied by one is itself.

How number one is utilised by human being in life:

1. One that is first in rank, order, or importance.

Your product is number one in market. You are number one if you are a good cook, a good company with a good product is rated number one in that particular industry to which it belongs.

2. Foremost in quality; first-rate: status, importance, etc.; a number one performance.

**Dr Darshika Nayan Shah**, W/o **Nayan M Shah**,  
Regional Sales, Flowserve Sanmar, Vadodara.

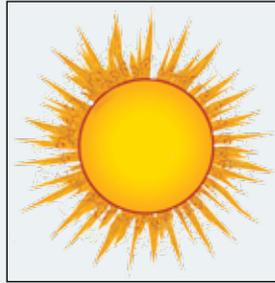


## A big zero

In A.D. 628, a Hindu astronomer and mathematician named Brahmagupta developed a symbol for zero — a dot underneath numbers. He also developed mathematical operations using zero, wrote rules for reaching zero through addition and subtraction, and the results of using zero in equations. This was the first time in the world that zero was recognised as a number of its own, as both an idea and a symbol.

Today, zero — both as a symbol and a concept means the absence of any quantity — allows us to do complicated equations.

Zero was invented independently by the Babylonians, Mayans. The Babylonians got their number system from the Sumerians, the first people in the world to develop a counting system.



Recently many people throughout the world celebrated the new millennium on 1 January 2000. Of course they celebrated the passing of only 1999 years since when the calendar was set up no year zero was specified. Although one might forgive the original error, it is a little surprising that most people seemed unable to understand why the third millennium and the 21st century begin on 1 January 2001. Zero is still causing problems!

**Vivek Singh**, Sales, BS&B Safety Systems, Delhi.

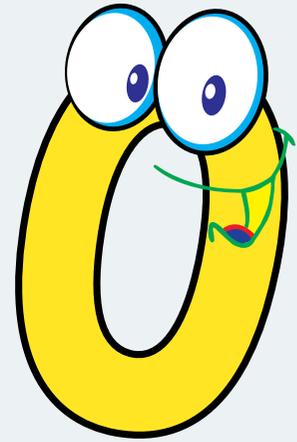
## Zero worth

A person without any value (a worthless person) is often compared with “0”. But the concept of zero has changed civilizations that have discovered how to make it work for them. From simple counting to advanced mathematics, zero has played a pivotal role enabling the world to progress. In today’s business environment, zero is still a powerful number. Companies are constantly striving to lift measures like revenue, profit, and number of customers further away from zero. On the other side of the continuum, zero is a target when looking for opportunities to reduce costs, inefficiency, and competition.

When anyone thinks of one hundred, two hundred, or seven thousand the image in his or her mind is of a digit followed by a few zeros. The zero functions as a placeholder; that is, three zeroes denote that there are seven thousands, rather than only seven hundreds. If we were missing one zero, that would drastically change the amount. Just imagine having one zero erased from or added to your salary!

**Manbir Singh**, Customer Service, Xomox Sanmar, Delhi.

## What are the most interesting questions where the answer is ‘zero’?



- 1) How many times has Pluto revolved around the sun since its discovery?
- 2) Number of times Shahid Afridi has faced 100 balls in ODI Cricket?

Shahid Afridi has played 350 One-Day International matches, where he scored 7360 runs with 6 centuries and 35 half centuries, but he has not played 100 balls in an innings yet. (He has played 94 balls for his innings 124 (HS)).

- 3) Number of times Chris Gayle has run 3 runs? Chris Gayle has 13000+ international runs, but he never ran for a 3.

- 4) Number of times Vivian Richards has played wearing a helmet?



Sir Vivian Richards is regarded as one of the greatest batsmen of all time and as one of the best players in the history of the sport, played his entire 17-year career without wearing a helmet.

- 5) How many ODI world cups or Champions trophies have England won up till now?
- 6) How many First Ball Ducks has Rahul Dravid got in his career spanning 164 test matches?
- 7) How many runs did the legendary batsman Sir Donald Bradman score in his last test match?
- 8) How many women have been the President of the USA yet?
- 9) What is the percentage of attendance required at BITS Pilani?
- 10) Art value of latest “100 Crore + Club” movies in bollywood?
- 11) The number of times I’ve read the Terms and Conditions before clicking on I Accept?

**Abhishek Tuli**, Sales, Xomox Sanmar, Delhi.

**Although we resemble 0 in shape, we are useful in a number of ways.**



