PUNJAB ASSOCIATION'S

ANNA ADARSH COLLEGE FOR WOMEN

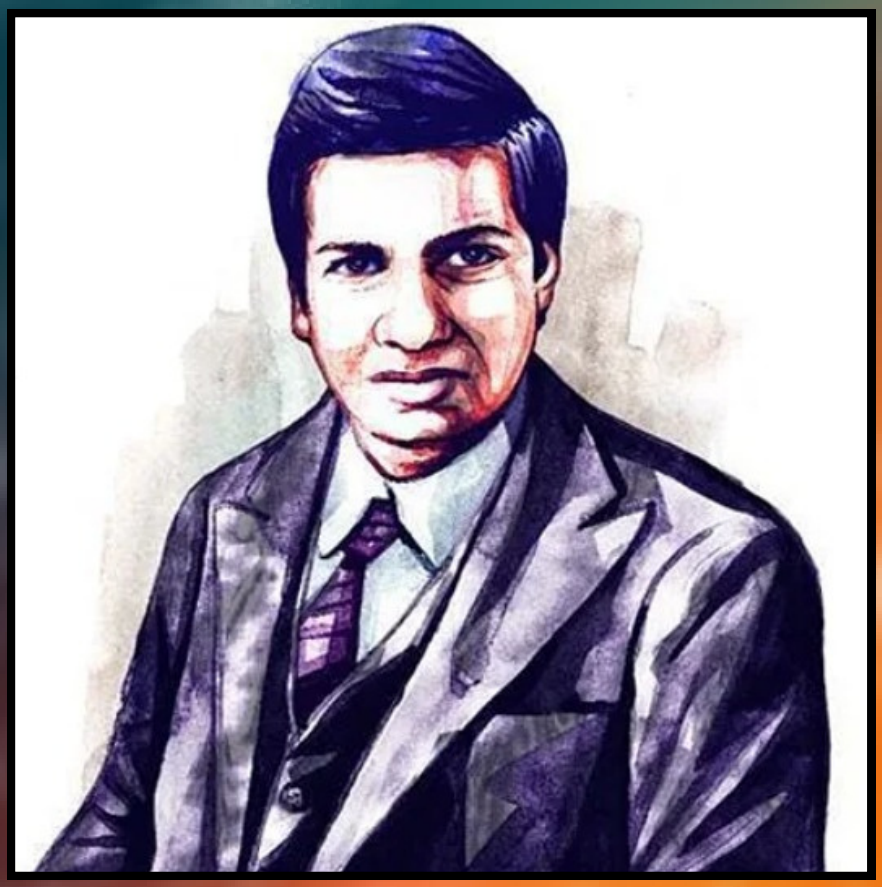
(RE-ACCREDITED BY NAAC WITH A++ GRADE)

DEPARTMENT OF MATHEMATICS

INFINITY

and beyond...

November 2023, VOL. 3, ISSUE 1



"AN EQUATION MEANS NOTHING UNLESS IT EXPRESSES A THOUGHT OF GOD."

– SRINIVASA RAMANUJAN

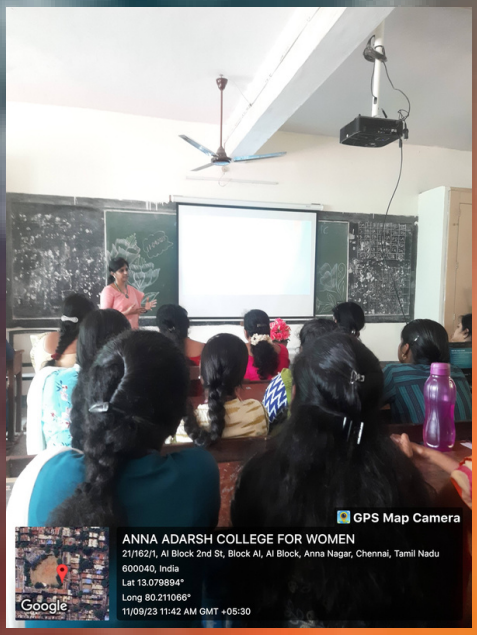
IN THIS ISSUE

MANOEUVRE

"INNOVATION, CREATIVITY & ENTREPRENEURSHIP"

The Post Graduate Department of Mathematics in association with The Institution Innovation Council organized a orientation program on 8/8/23. Ms. Nirmal Veena.S, Assistant Professor of the Department of Mathematics delivered her speech on the topic "Innovation, Creativity & Entrepreneurship" . The speaker gave clear explanation about creativity , their personality traits and illustrated about Innovation. Further she enlightened that Entrepreneurship is the result of a disciplined, systematic process of applying creativity and Innovation.

"HEALTH AND HYGIENE IN WOMEN"



On 11.09.2023, a Sensitization Program was held by the Post graduate Department of Mathematics and IAQC on the topic "HEALTH AND HYGIENE IN WOMEN" . The guest speaker for the day was Dr. Anita.R who is a gynaecologist and fertility specialist, GLB hospitals, Chennai. She enlightened the students with her talk on the various topics under women's hygiene, Leukorrhea, cancer in women - namely breast cancer, cervical cancer and the various risk factors leading to cancer and also about the preventive care and screening strategies.

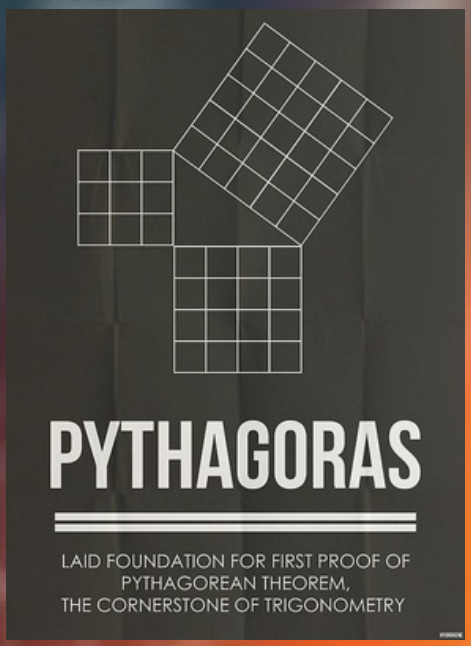
MANOEUVRE

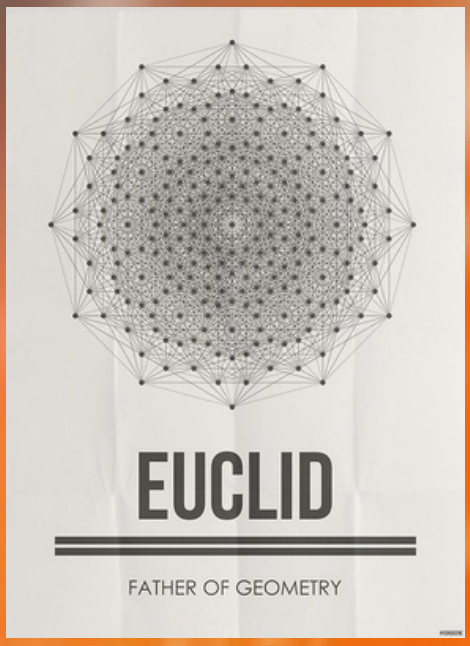
CYBER SECURITY AND PRIVACY

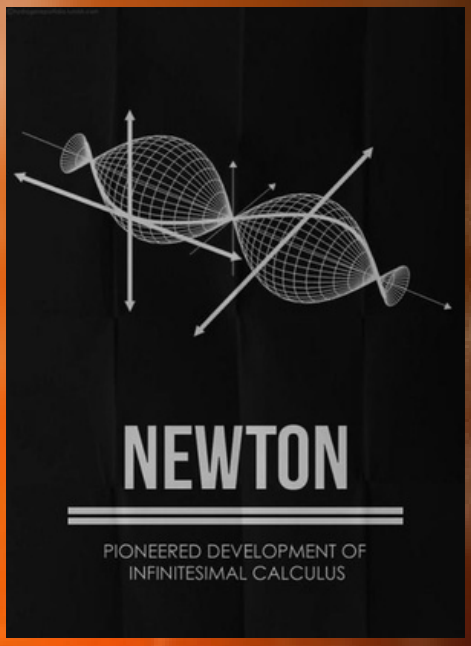
On the 13.9.23, an awareness program was held by the Post Graduate Department of Mathematics and IAQC on the topic CYBER SECURITY AND PRIVACY. The Guest speaker for the day was Dr. Hannah Vijaykumar who is an Associate professor and Head, Dean of computational studies, Anna Adarsh College For Women.

She educated students on the difference between keeping data private and keeping data secure, the importance of cyber security, CIA Triad, Confidentiality, Integrity and Availability.

She elaborated on the various ways we loss our data, like phishing and the types of phishing, social engineering over the phone, text messages, instant message, email and also the detailsabout malwares like virus, Trojan horse, bombs, email worms and zombie & botnet. She also spoke in detail about cyber crime and the Denial of service attack(DOS).







MATHEMATICS IS ALL ABOUT UNRAVELING THE QUEST TO SOLVE

LAUDABLE

CLASS TOPPERS 2022- 2023

I B. Sc., Maths	SHARONIYA .V
II B. Sc., Maths	DIVYA DHARSHINI .S
III B. Sc., Maths	SWETHA .B
I M. Sc., Maths	SANGEETHA .S
II M. Sc., Maths	SOUNDHARIYA .G

UNIVERSITY RANK HOLDERS 2023
UNDERGRADUATE

PREETHI V.M.
RANK 3

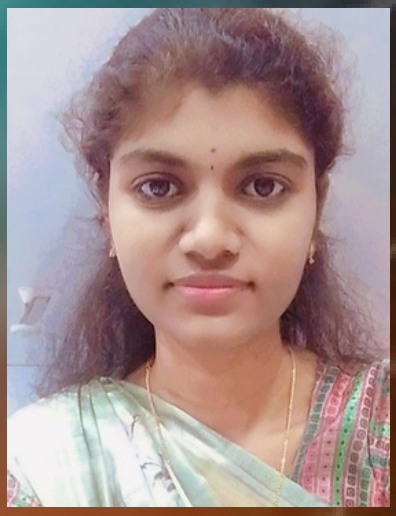
PAVITHRA .S
RANK 4

LAUDABLE

UNIVERSITY RANK HOLDERS 2023
POSTGRADUATE

DEEPIKA .M
RANK 2

RAMAPRIYADARSHINI .A
RANK 5



NISHA .R
RANK 6

RENUKA .V
RANK 7

SHREE .M
RANK 8

DEEPIKA .L.N
RANK 9

CHRONOGRAPH

* MRS. J.PRABHA, MEMBER, PG BOARD OF STUDIES, MATHEMATICS - UNIVERSITY OF MADRAS.
* MRS. R.MAHALAKSHMI, EXTERNAL CHAIRMAN, AUTONOMOUS.STREAM, D.B.JAIN COLLEGE.
* DR,T. SANGEETHA, HAS COMPLETED HER PHD. IN LATTICE THEORY.

PAPER PRESENTATION

FACULTY NAME	CATEGORY	TITLE/TOPIC	ORGANIZATION / INSTITUTION/ JOURNAL
Ms.P.P.Sharmishta	Paper Publication	Oscillation of First Order Non-Linear Advanced Differential Equations with Non-Monotone Arguments	Journal of Biomechanical Science and Engineering
	Refresher Course	Information and communication tools,e-content development and learning management systems	UGC,Malaviya Mission teacher training centre,University of Calicut
	Paper Presentation	Ocillation criteria for first order delay differential equations caused by non monotone arguments.	Ethiraj College for Women
Ms.N.K.Vinodhini	Paper Publication	Antimagic Labeling of Triangular Book Graph and Double Fan Graph	Bulletin of Pure and Applied Sciences
Ms.K.Sheela	NPTEL Course Cmpletion & FDP	Introduction to Machine Learning - under Elite Category	IITM
Ms.R.Mahalakshmi	Paper Publication	Optimization of Fuzzy Sequencing Problems with Heptagonal Fuzzy Numbers	Journal of Propulsion Technology
	Paper Publication	An Enhanced Approach for Solving Fuzzy Sequencing Problems with Trapezoidal Fuzzy Numbers	Journal of Harbin Engineering University
Dr.M.Arunma	FDP	Blended learning: Concepts and tools	Ramanujan College, University of Delhi.
	FDP	Frontiers of Mathematics	SRMIST,Ramapuram, Chennai
	FDP	Naan Mudhalvan - Data literacy with Tableau	Tamil nadu skill development corporation
	Refresher	Python & Vedic Mathematics	Ramanujan College, University of Delhi
	FDP	e-Content Development	GAD-TLC SGTB Khalsa College, University of Delhi

CHRONOGRAPH

FACULTY NAME	CATEGORY	TITLE/TOPIC	ORGANIZATION / INSTITUTION/ JOURNAL
Dr.S.Geetha	FDP	Blended learning: Concepts and tools	Ramanujan College, University of Delhi.
	FDP	Frontiers of Mathematics	SRMIST,Ramapuram, Chennai
	Refresher	Python & Vedic Mathematics	Ramanujan College, University of Delhi
	FDP	Writing Proposal for Funded Project	Global Institute of Statistical Solutions
Dr.S.Gayathri	FDP	Blended learning: Concepts and tools	Ramanujan College, University of Delhi.
	FDP	Frontiers of Mathematics	SRMIST,Ramapuram, Chennai
	Refresher	Python & Vedic Mathematics	Ramanujan College, University of Delhi
	FDP	Writing Proposal for Funded Project	Global Institute of Statistical Solutions
	NPTEL Course Completion & FDP	Measure Theoretic Probability 1	IITK
Dr.V.Sathyavathy	FDP	Frontiers of Mathematics	SRMIST,Ramapuram, Chennai
	FDP	e Content Development	GAD-TLC SGTB Khalsa College, University of Delhi
Dr.T.Sangeetha	Workshop	AI Tools for Mastery in Modern Teaching	IMPA
	Judge	Science Expo 2023	Velammal Vidyalaya Annexure, Mela Ayanambakkam

CHRONOGRAPH

Priyadharshini P and Varhsini J from II M.Sc.Mathematics won 2nd place in Intercollegiate Paper Presentation Competition conducted by Ethiraj College for women on 31/08/2023.

Afrah Khader and Shalini S from II M.Sc.Mathematics won 1st place in Intercollegiate face painting Competition conducted by Stella Maris College on 12/09/2023.

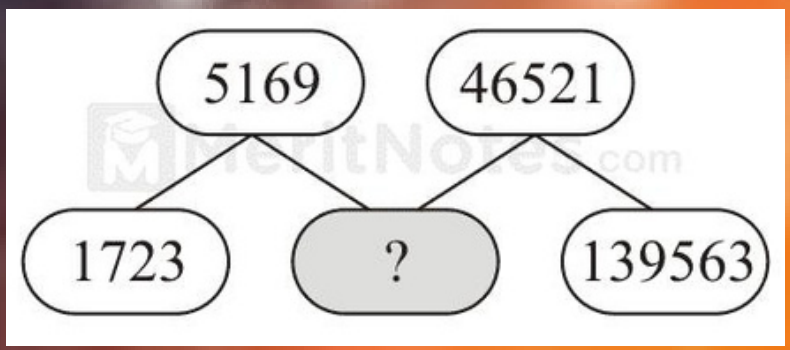
Sharoniya V and Abinaya S from II B.Sc.Mathematics won 2nd prize in Intercollegiate Competition (Mathbate) conducted by Madras Christian College on 04/09/2023.

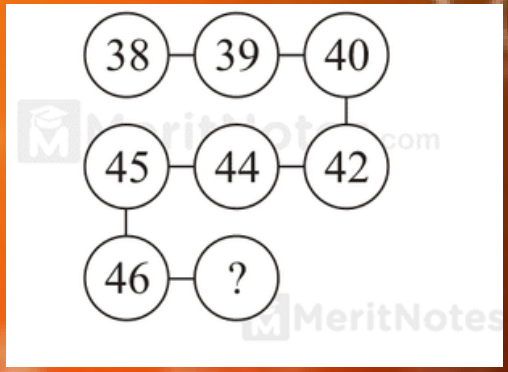
CHRONOGRAPH

Nandhini.T from II M.Sc.Mathematics won 1st place in Intercollegiate Dance Competition conducted by Shri Krishnaswamy College For Women on 14/09/2023.

Rajalakshmi V from I B.Sc.Mathematics won 3rd place in photography conducted by our college during manjari

Which number should replace the question mark?





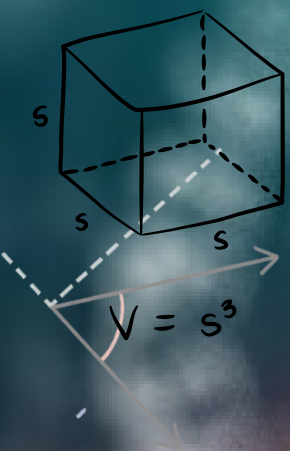
– POOSAKANI
I B.SC. MATHEMATICS

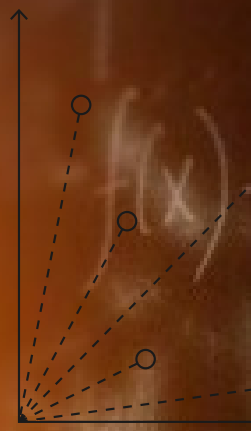
CHRONOGRAPH

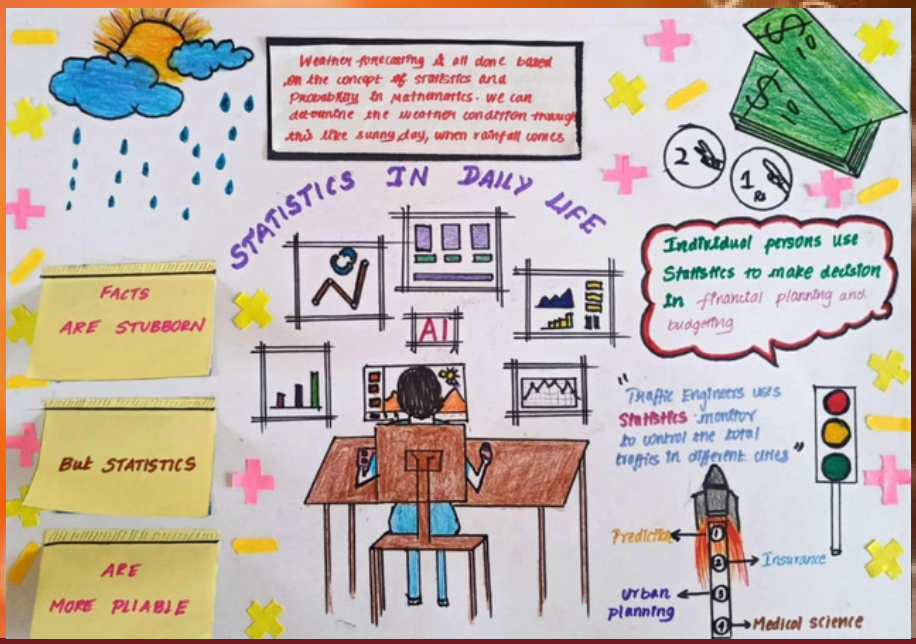
Department of Mathematics of Women's Christian College conducted an Intercollegiate Math Fest "XTREME'23". Our college has batched second overall place in the Fest.

1	ABINAYA	II B.SC.	MATHTARKA(MATHS DEBATE)	3RD PRIZE
2	SHARONIYA	II B.SC.	MATHTARKA(MATHS DEBATE)	3RD PRIZE
3	CHARULATHA	II B.SC.	TIK TIK TIK (QUIZ)	1ST PRIZE
4	SOWMIYA	II B.SC.	TIK TIK TIK (QUIZ)	1ST PRIZE
5	NANDHINI	II B.SC.	TIK TIK TIK (QUIZ)	1ST PRIZE
6	P D HARIPRIYA	III B.SC.	FINE TUNE	1ST PRIZE
7	SRIHARINI S	III B.SC.	FINE TUNE	1ST PRIZE
8	PREETHIGAA.U	I M.SC.	PAINT-R-TREE	1ST PRIZE
9	MADHUMITHA.P	I M.SC.	PAINT-R-TREE	1ST PRIZE
10	AFRAH KHDER	II M.SC.	IMPRINT FIST	1ST PRIZE
11	NANDHINI T	II M.SC.	IMPRINT FIST	1ST PRIZE
12	PRIYADARSHINI P	II M.SC.	PAPER PRESENTATION	2ND PRIZE
13	NITHYA SREE N V	II M.SC.	FINE TUNE	1ST PRIZE
14	DEEPIKA V	II M.SC.	FINE TUNE	1ST PRIZE
15	DURGA DEVI R	II M.SC.	CARTELL SKIZZ	1ST PRIZE
16	POOJA M	II M.SC.	CARTELL SKIZZ	1ST PRIZE

CHRONOGRAPH



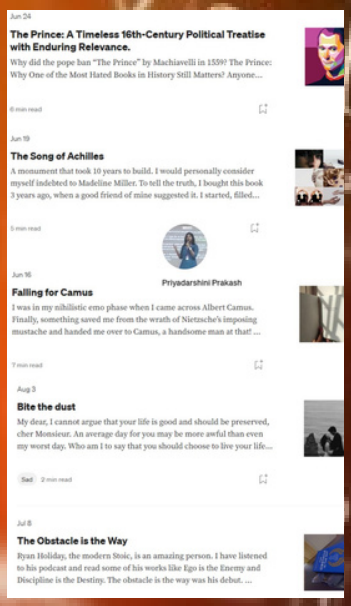




MASTER STROKE

Nandhini.T and Srivarshini.E from II M.Sc.Mathematics has participated in G20 Events 2023 at Ethiraj College For Women

P. Priyadarshini, a II MSc Mathematics student, unveils a literary treasure on her website https://priyadarshiniprakash.medium.com/ From the spellbinding narratives of Khaled Hosseini to the profound depth of Albert Camus' classics, her book reviews transcend genres. She also writes entertaining and deep epistolaries and poems. Through her adept reviews and insightful analysis she encourages readers to start their reading journey and embrace the intellectual catharsis it provides!



CIPHERING HOLD

~THE MAGICAL MATH ADVENTURE~

Once upon a time in the village of Arithmetica, there lived a young girl named Emma. Emma loved math more than anything else in the world. She could solve tricky problems faster than a rabbit hopping through the fields. One sunny morning, as she was practicing her multiplication tables, a mysterious book appeared on her desk.

The book was ancient and bound in cranky golden pages. Its title read, "The Enchanted Equations." Emma opened the book, and as she read its pages, the numbers and symbols seemed to come to life. To her astonishment, she discovered that this book held magical math spells.

Emma started on a journey filled with numbers that could fly, fractions that could dance, and equations that could turn into bridges to cross rivers. With the book's guidance, she helped her friends in Arithmetica solve everyday problems using these magical math spells.

One day, a powerful storm threatened to flood the entire village. Emma knew she had to use the book's magic to save her home. She conjured a colossal multiplication spell that built a mighty dam to protect the village. Her friends helped her with their math skills too, and together they stopped the storm.

From that day on, Emma and her friends used math magic to solve all sorts of problems in Arithmetica. They learned that math wasn't just about numbers; it was a powerful tool that could make their world a better place.

And so, in the village of Arithmetica, math became a magical adventure where numbers held the keys to solving any challenge that came their way. Emma and her friends knew that with a little math and a dash of magic, they could conquer anything.

~ M.SHIFANA NOWSIN
I B.SC. MATHEMATICS

"MATH IS THE ONLY PLACE WHERE TRUTH AND BEAUTY MEAN THE SAME THING"

CIPHERING HOLD

~ INTERESTING FACTS ~

∞ The mathematical word “hundred” coins from “hundrath” which is an old Norse term that actually referred to a quantity of 120

∞ You can use three geometric cuts to a cake and get 8 pieces.

∞ A standard piece of paper can only be folded seven times, however, according to mathematical theory, if you could fold a piece of paper in half 103 times its thickness would equal that of the observable universe..

~ SHREYA SIJO
I B. SC., MATHEMATICS

~MATH FACTS~

➢The word MATHEMATICS comes from a Greek mathematician which means learning, study, Science, Mathematics, means "fond of learning".

➢Mathematics is an anagram of “ME ASTHMATIC”.

➢Different names for the number 0 include zero, nought, naught, nil, zilch and zip.

➢Zero(0) is the only number which cannot be represented by Roman numerals.

➢The number 5 is pronounced as “HA” in Thai language. 555 is also used by some as slang for “HaHaHa”.

➢Every odd number has an ‘e’ in it.

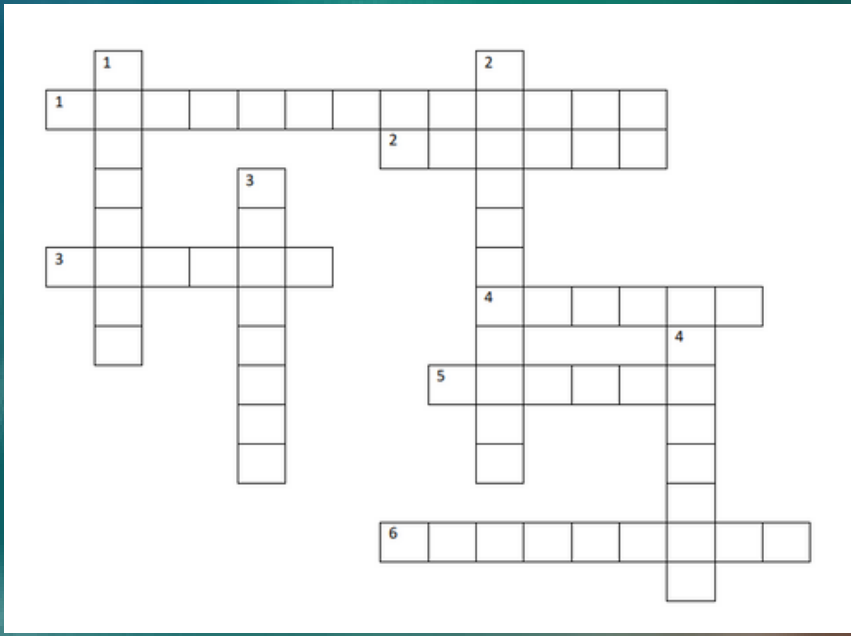
➢‘Jiffy’ is an actual unit of time. It means 1/100th of a second.

➢Most Mathematical symbols weren’t invented until the 16th century. Before that, equations were written in words.

➢“Four” is the only number in the English language, that is spelled with the same number of letters as the number itself.

~Sneka J
III B. Sc., Mathematics

CIPHERING HOLD



DOWN

1) According to _____'s conjecture, every even integer greater than 2 can be expressed as the sum of two primes. (8)

2) For any two positive integers a,b there exists a positive integer n such that na > b is called _____ property. (11)

3)_____ are non- linear pattern that infinitely repeats in different patterns. (8)

4) Sum of any two coprime numbers is always coprime to their _____. (7)

ACROSS

1) _____ is the area of mathematics that involves the act of counting. (13)

2) _____ introduced the concept of g c d. (6)

3) _____'s theorem is used for primality test . (6)

4) All four digit palindrome numbers are divisible by _____. (6)

5) _____is the mathematical concept used to organize data in machine learning. (6)

6) _____ sequence appears in the flowers, spiral shape of shells etc.,.

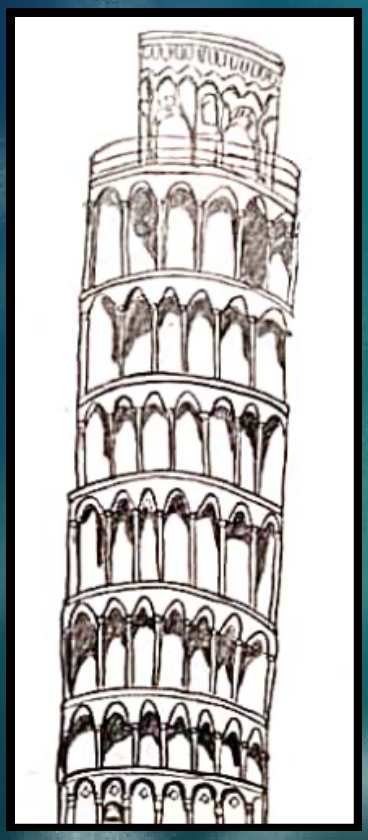
~ DEVIKA M.S
II M. SC., MATHEMATICS

ANSWERS

DOWN
1)GOLDBECH
2)ARCHIMEDEAN
3)FRACTALS
4)PRODUCT

ACROSS
1)COMBINATORICS
2)EUCLID
3)FERMAT
4)ELEVEN
5)VECTOR
6)FIBONACCI

ELICIT ART



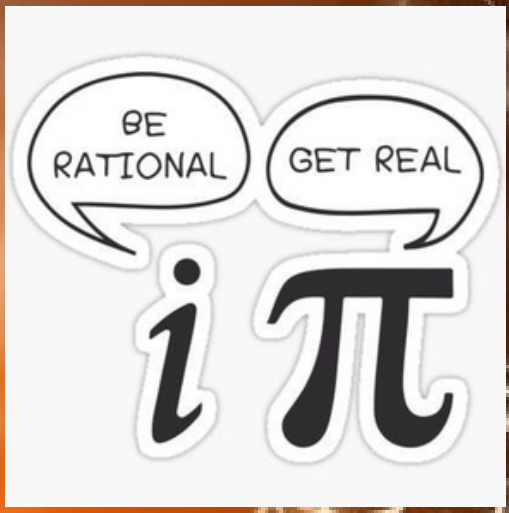
LEANING TOWER OF PISA

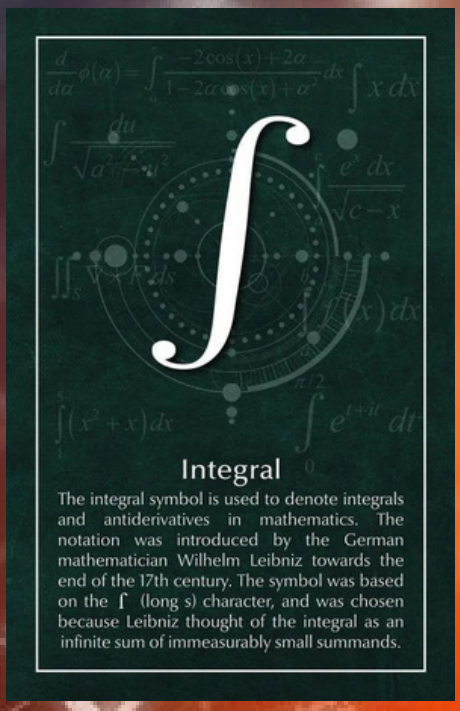
DID YOU KNOW THAT THE 'LEANING TOWER OF PISA' HAS A 4° LEAN ANGLE WITH THE GROUND? THE TOWER MAKES TWO DIFFERENT ANGLES WITH THE GROUND (94° AND 86°), THESE ANGLES FORM A LINEAR PAIR OF ANGLES! A LINEAR PAIR OF ANGLES IS A PAIR OF ADJACENT ANGLES WHOSE NON-COMMON SIDE ARE OPPOSITE RAYS.

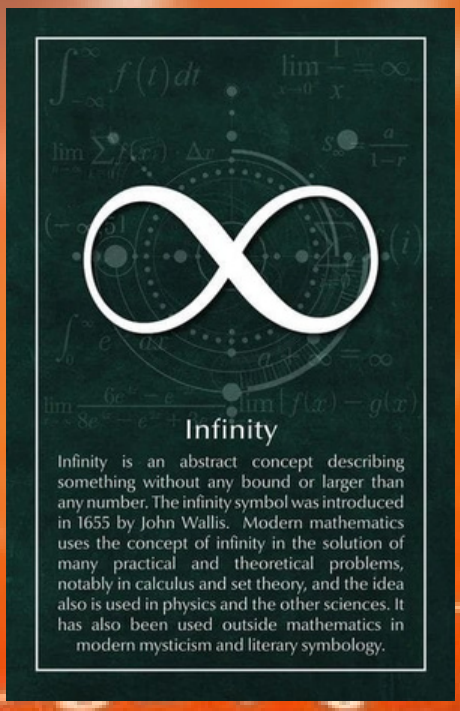
V HARINI
I B.SC MATHEMATICS

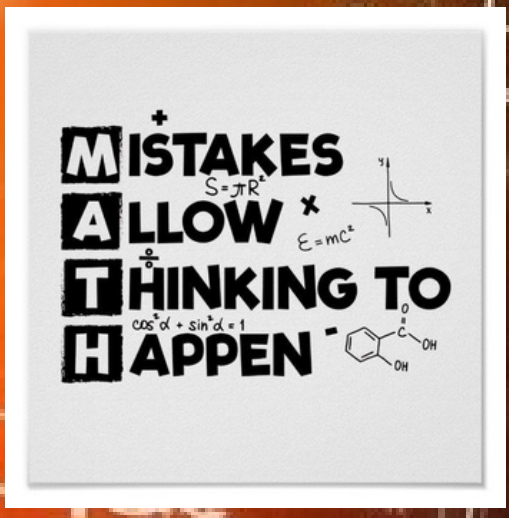
GO DOWN DEEP ENOUGH INTO ANYTHING AND YOU WILL FIND MATHEMATICS.

– DEAN SCHLICTER



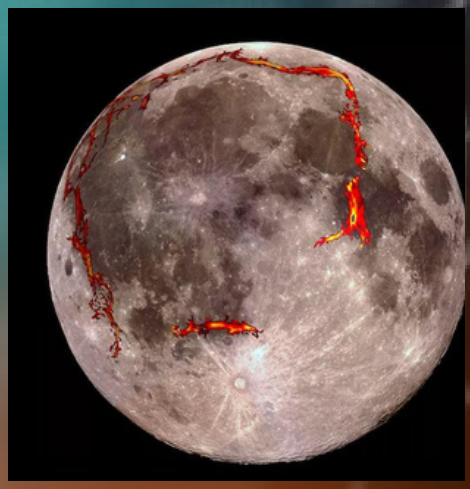






NAVIGATION WITH NUMBERS

CRACKING LUNAR MYSTERIES



Chandrayaan 3 carries a treasure trove of scientific instruments to decode lunar enigmas. Yet, it's not just the instruments but also the mathematics behind data analysis that unlocks the Moon's secrets. Mathematical modelling and data analysis help decipher the Moon's geological history, the presence of water ice in shadowed craters, and the composition of lunar terrain.

THE COSMIC OVERTURE

As Chandrayaan 3 embarks on its cosmic overture to the Moon, we are witnesses to a grand symphony of mathematics and science. It's not just a mission; it's a testament to human ingenuity. Behind every successful lunar exploration lies the hidden hand of mathematics, conducting the cosmic dance of numbers.

In the coming months, as Chandrayaan 3 unveils the secrets of the Moon's terrain and history, let's remember that mathematics isn't just a tool- it's the magic wand that brings the Moon a little closer to Earth. It's the cosmic dance of numbers that reminds us of our ability to explore the unknown and discover the extraordinary. Chandrayaan 3 is not just a mission; it's a mathematical masterpiece in the making, and we are all spectators to this celestial performance.

NAVIGATION WITH NUMBERS

MATHEMATICS AND THE FUTURE OF LUNAR EXPLORATION

As we celebrate the mathematics behind Chandrayaan 3, we also look to the future of lunar exploration. The data collected by this mission, analysed using mathematical techniques, will undoubtedly pave the way for future missions.

Mathematics will continue to play a vital role in planning and executing lunar missions. With plans for establishing lunar bases, mining lunar resources, and perhaps even launching missions to Mars from the Moon, the need for mathematical precision in space exploration is only growing.

In conclusion, Chandrayaan 3 represents a beautiful marriage of technology and mathematics. As it embarks on its mission to unlock the mysteries of the Moon, it does so with the guidance of mathematical equations and algorithms that make the impossible possible. The next time you look at the Moon in the night sky, remember that it's not just a celestial body; it's a destination waiting to be explored, and mathematics is the key to unlocking its secrets.

MATHEMATICS IS THE KEY AND DOOR TO THE SCIENCE

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SHARMILI P
II M.SC. MATHS

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The AMS Leroy P. Steele Prize for Lifetime Achievement is awarded for the cumulative influence of the total mathematical work of the recipient, high level of research over a period of time, particular influence on the development of a field, and influence on mathematics through PhD students. The Steele Prizes were established in 1970 in honor of George David Birkhoff, William Fogg Osgood, and William Caspar Graustein and are endowed under the terms of a bequest from Leroy P. Steele. The current award is $10,000.

Manjul Bhargava (b 1974) is the youngest full professor of mathematics at Princeton University. His research interests span algebraic number theory, combinatorics, and representation theory. He graduated from Harvard University in 1996 and received his doctorate from Princeton in 2001, working under Andrew Wiles. His breakthrough Ph.D. thesis surprised the mathematical community by generalizing the classical Gauss composition law for quadratic forms to many other situations. Bhargava has won several awards for his research, including the AMS–MAA–SIAM Frank and Brennie Morgan Prize, a Clay Research Fellowship, the Clay Research Award in 2005, and the Leonard M. and Eleanor B. Blumenthal Award for the Advancement of Research in Pure Mathematics. He was named one of Popular Science Magazine's "Brilliant 10" in November 2002. He recently won the American Mathematical Society's Cole Prize in number theory and the SASTRA Ramanujan Prize for his outstanding contributions to number theory.