



AFFINE

THE ASSOCIATION OF MATHEMATICS DEPARTMENT
DAULAT RAM COLLEGE

MATHPUNCH

ANNUAL MAGAZINE OF DEPARTMENT OF MATHEMATICS

12th EDITION
SESSION 2024-25



Convenor: Dr. Astha Chauhan
Co-Convenor: Ms. Sapna Kumari Meena

EDITORIAL NOTE

AFFINE-The Association of Mathematics Department is back with yet another edition of its Annual Magazine: MATHPUNCH'25. It presents a unique opportunity to delve into the captivating world of numbers, equations, and the profound impact of mathematics on our lives. This year, we invite you to embark on a journey to uncover the intricate ways in which mathematics shapes our understanding of the universe and empowers us to solve complex problems across diverse fields.

Our magazine will feature compelling articles that showcase the diverse applications of mathematics in everyday life. From the elegant algorithms to the meticulously written research papers, we will explore how mathematical principles underpin groundbreaking technologies and drive innovation. This edition includes insightful ideas from students, our esteemed faculty members, and our respected alumni which go beyond the practical applications of mathematics, showcasing the intrinsic beauty that transcends its utility.

We will explore the remarkable journey of Affine, marked by a diverse range of webinars, seminars, workshops, and competitions.

As editors, we are thrilled to present this collection of articles that highlight the vibrant and ever-evolving landscape of mathematics. We hope this magazine sparks your curiosity, ignites your imagination, and deepens your appreciation for the profound impact mathematics has on the world around us. We extend our heartfelt gratitude to our esteemed faculty members for their invaluable support throughout this journey.



MAULI UPADHYAY



VANSHIKA GUPTA



LAKSHITA BHATI



NANCY



SOMYA JOSHI



AANYA AWASTHI



SWASTIK

TABLE OF CONTENTS

01

INTRODUCTION

ABOUT AFFINE	01
FACULTY OF THE DEPARTMENT	03
UNION	05
EXTENDED COMMITTEE	08

SEMINARS / WEBINAR

HYMNS IN YAJURVEDA	11
ACTUARIAL SCIENCE	12
CAREER IN FINANCE	13
IIT JAM	14

02

EVENTS

SHOONCH'25

• INVITED TALK	15
• MATHSHOT 3.0	16
• LOG-AD-RITHM	17
• THE INFINITY STAGE	18
• CRYPTIC CODE HUNT	19
• SKETCHY-GUESSER	20
• MATHEMATI-CLIPS	21

03

STUDENT'S CORNER

STUDENTS' SANCTUM	22
ACHIEVEMENTS	27
TEACHER NOTE	30
ALUMNI CORNER	31

04

Introducing

AFFINE

Mathematics is the language of the universe, revealing patterns, solving mysteries, and unlocking endless possibilities. From the elegance of simple equations to the depth of complex theorems, math is an adventure that challenges your mind and ignites curiosity. Every problem you solve brings you closer to understanding the world in a whole new way. Let's embrace the beauty and excitement of math—it's not just a subject, it's a way of thinking!

Affine-The Association of Mathematics Department, Daulat Ram College is thrilled to have you join us in exploring the wonderful world of mathematics through a variety of exciting events and sessions that we organize throughout the year. From interactive workshops, and insightful seminars to thought-provoking discussions and hands-on learning experiences, Affine is all about celebrating the beauty and creativity of mathematics in an engaging and fun environment. Our department takes great pride in fostering a community where curiosity thrives, and learning knows no bounds.



A highlight of our department's calendar is MathPunch, the annual magazine we proudly publish. While the first edition was launched in the year 2014 in the benevolent presence of Prof. Shobha Bagai at Shoonya'14, we have carried this legacy with us over the past ten years and yet again, return with the 12th edition of the same. Traditionally, every year, the new edition of the magazine is launched by our respected Principal Prof. Savita Roy, Head of the Department and various other esteemed personalities.



Dive into MathPunch, our annual magazine, where curiosity meets creativity. Packed with fascinating puzzles, insightful articles, and all things math, it's your perfect companion to explore the exciting world of numbers. Get inspired, challenge your mind, and see math in a whole new light.

Without mathematics, there's nothing you can do. Everything around you is mathematics. Everything around you is numbers.

~ Shakuntala Devi

FACULTY OF THE DEPARTMENT



DR. ASTHA CHAUHAN
(ASSOCIATION CONVENOR)

A perfect blend of intellect and approachability, she brings a unique balance to the classroom. With her deep expertise and engaging teaching style, she makes even the most complex concepts accessible. She knows when to keep it light and when to push for excellence, creating an environment where students learn, grow, and truly enjoy mathematics.

MS. SAPNA KUMARI MEENA
(ASSOCIATION CO-CONVENOR)

She is an incredibly kind and patient educator who goes above and beyond to ensure every student, no matter their level, understands the concepts of mathematics. Her dedication to helping even those who struggle the most and making them excel, speaks volumes about her commitment to teaching. Renowned for her clear explanations and deep understanding of mathematical principles, she truly makes a difference in every learner's journey.



DR. SEEMA KHURANA

Her exceptional teaching style not only imparts knowledge but also inspires us to think critically and approach challenges with confidence. With a unique blend of patience and enthusiasm, she turns every lesson into an opportunity for growth, making even the most complex topics feel achievable. Thank you for being such an incredible guide and mentor. You don't just teach; you inspire and guide us to think critically and creatively.



DR. POONAM LAKHOTIA
(TEACHER-IN-CHARGE, 2024-25)

She is renowned for her exceptional teaching skills and her unique approach to Mathematics. Her ability to connect abstract concepts to real-world applications makes even the most complex topics feel approachable. With her engaging methods and deep understanding, she sparks a genuine interest in the subject, inspiring her students to excel.





DR. JYOTI SHARMA

She is a highly respected guide, known for her clear and insightful explanations of Mathematical concepts. Her ability to simplify even the most challenging topics has earned her the admiration of students and peers alike. With her patient guidance, she fosters a deep understanding of Mathematics that empowers her students to succeed.

DR. VIKAS DHAKA

He is a revered teacher known for his exceptional intellectual depth and mastery of Mathematics. His lectures are filled with insightful explanations, often unraveling the complexities of abstract concepts with ease. Students admire his ability to break down difficult problems into understandable steps, making advanced topics accessible to all. His passion for Mathematics inspires countless students to pursue the subject further, fostering a love for numbers and logic.



DR. UMESH KUMARI

She is the kind of educator who makes mathematics both fascinating and rewarding. Her passion for the subject reflects in her teaching, where she seamlessly blends precision with an encouraging approach. She challenges her students to think beyond formulas, inspiring them to develop a true appreciation for the beauty of mathematics while maintaining a supportive and motivating environment.



DR. SHELLY VERMA

With a rare combination of brilliance and warmth, she transforms the learning experience. Her ability to simplify challenging mathematical concepts while maintaining academic rigor is truly admirable. She fosters curiosity, encourages critical thinking, and ensures her students feel confident tackling any problem. Her patience and clarity make her lectures not just educational but also deeply engaging.



MR. VIRENDRA KUMAR

His enthusiasm for teaching is contagious, creating an environment where learning math becomes an exciting and rewarding journey. He has an incredible ability to break down difficult concepts into manageable steps, making sure every student not only understands but thrives. Through his encouragement and dedication, he helps students discover their full potential, guiding them for future.





AASTHA YADAV (PRESIDENT)

Serving as the President of Affine, the Mathematics Association, has been one of the most enriching experiences of my academic journey. This role has not only deepened my passion for mathematics but has also strengthened my organizational and teamwork skills.

From the beginning, my goal was to create an engaging and inclusive environment where students could explore the beauty of mathematics beyond textbooks. Organizing seminars, workshops, and competitions allowed me to interact with some of the brightest minds in the field, fostering a culture of curiosity and problem-solving among our members. Balancing academic responsibilities with organizational duties was challenging, but it taught me valuable lessons in time management and strategic planning. Leading Affine was not just about mathematics; it was about inspiring others, fostering innovation, and creating a legacy that will continue to thrive in the years to come.

L. SHUBANGI (VICE-PRESIDENT)

Being the Vice President of the Math Department has been so cool and rewarding. I've been able to organize some fantastic events and assist in bringing our student body closer together, and that's allowed me to combine my leadership skills with my passion for math. Whether I was organizing competitions, collaborating on projects with others for school, or just hangin' out (and sometimes getting stuck on) things with others, everything has been totally worth it.

This experience was made so memorable by my amazing team, the super energetic members, and professors who were always there for us. The brainstorming session, the teamwork, and even the last-minute issues made every single minute worth it. Math might be all about precision, but this whole experience was really about teamwork, and learning. I'm really grateful for this experience and all the amazing people who made it such a valuable part of my college life!



LAKSHITA BHATI

(GENERAL SECRETARY)



My journey as the General Secretary of Affine - A Symphony of Numbers and Leadership. Serving as the General Secretary of Affine was more than just a leadership role—it was a transformative experience that shaped my perspective on teamwork, problem-solving, and growth. This year was a thrilling rollercoaster of organizing events, brainstorming with my incredible team and pushing the boundaries of what a mathematics department could achieve. I am truly grateful for the unwavering love and support AFFINE has given me and hence no achievement is truly individual. The success of every event, every initiative was just possible because of the incredible support and trust by our teachers, union members and each and everyone who has been a part of this - Thank you for making the experience truly unforgettable. Here's to the future, to new challenges, and to the endless possibilities that mathematics offers! Keep questioning, keep solving and keep exploring.

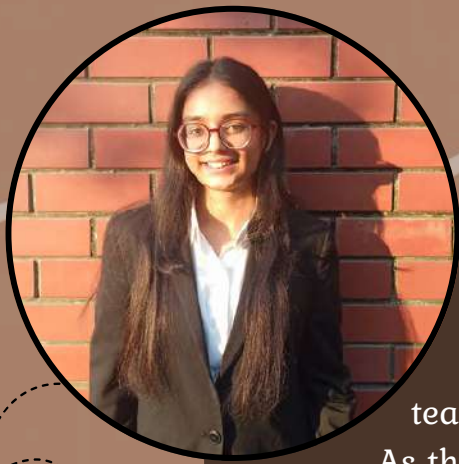


NANCY

(TREASURER)

My tenure as Treasurer has been a transformative journey of growth, discovery, and relentless pursuit of excellence. I've honed my financial management skills and developed expertise in various fields, addressing diverse needs and fostering a culture of collaboration. This experience has yielded invaluable skills, knowledge, and lifelong lessons. I'm deeply grateful for the trust my peers have placed in me and for the opportunity to serve.

As I continue on my journey, I remain committed to excellence, driven by the conviction that perfection is a continuous journey of growth, learning, and exploration.



AANYA AWASTHI (JOINT SECRETARY)

Being part of AFFINE has been an adventure full of teamwork, problem-solving, and a little bit of controlled chaos! As the Joint Secretary, I've loved every moment—whether it was planning events, coordinating with teams, or just making sure things didn't turn into complete mathematical mayhem. From brainstorming sessions that turned into laughter marathons to the excitement of seeing our ideas come to life, it's been a journey of learning, fun, and friendships. Watching our department buzz with energy and enthusiasm has made every effort totally worth it—here's to more fun, numbers, and unforgettable moments with AFFINE!

SOMYA JOSHI (JOINT SECRETARY)

Being the Joint Secretary of Affine: The Association of Mathematics has been nothing short of an amazing adventure! From organizing events to collaborating with passionate peers, this role has been a perfect mix of creativity, leadership, and fun. It pushed me to think on my feet, manage multiple tasks, and communicate more effectively. Personally, it helped me grow in confidence, decision-making, and teamwork—skills I never knew I had! The experience has been incredibly fulfilling, teaching me how to juggle responsibilities while enjoying the process. It was a journey of growth, laughter, and unforgettable memories! I learned to handle pressure with grace, prioritize tasks, and communicate with people. I also realized the importance of teamwork—there's no 'I' in Affine, and working with such an energetic and passionate team made me appreciate the power of collaboration.



EXTENDED COMMITTEE 2025

PRIYANSHI SHARMA (CREATIVE HEAD)



As the creative head of AFFINE, I stand at the exhilarating crossroads of imagination and collaboration, where every idea is a spark waiting to ignite. Each meeting feels like a whirlwind of colors and concepts as we transform our collective passions into vibrant events and initiatives. I thrive on turning abstract ideas into unforgettable experiences—whether through eye-catching decorations or engaging narratives. Working with a diverse team, I cherish the moments when our unique perspectives collide, creating a symphony of creativity that elevates our projects. In those lively discussions, filled with laughter and inspiration, I feel the true heartbeat of AFFINE—an electric energy that fuels my passion, pushes boundaries, and creates lasting memories.



SHRUSHTI JAIN



SHIVANI



KEERTI



ZAHREEN SHAHID (MARKETING HEAD)



As the Marketing Head of AFFINE, I had the opportunity to lead a team of creative and enthusiastic individuals, tasked with promoting the society's events, activities, and initiatives. Over the past months, I've learned invaluable lessons about marketing, teamwork, and leadership. My experience as Marketing Head of AFFINE has taught me the importance of creativity, innovation, and teamwork in achieving success. I've learned to think outside the box, take calculated risks, and adapt to changing circumstances. As I move forward, I'm excited to apply these skills and lessons to future challenges and opportunities. I'm really grateful to all those who are part of my this beautiful journey.



MAULI UPADHYAY (DIGITAL HEAD)



As the Digital Head of AFFINE, I have had the opportunity to blend mathematics with creativity, making it more engaging and accessible in the digital era. My role goes beyond just handling social media—I've developed skills in graphic design, content creation, digital marketing, and audience engagement, all while ensuring that math is presented in an exciting and interactive way. From designing visually appealing posts to creating content that simplifies complex mathematical ideas, I've learned how to communicate with clarity and impact. Through this journey, I've honed my problem-solving, leadership, and teamwork skills, proving that math isn't just about numbers—it's about innovation, storytelling, and connecting with people in new ways!



CHANDANI



SHIVANGI ROY

SALONI (MANAGEMENT HEAD)



Serving as the Management Head of Affine, along with my team has been an incredible journey filled with learning, challenges, and rewarding experiences. This role has given me the opportunity to blend strategic planning with teamwork, ensuring the seamless execution of events and initiatives that promote mathematical enthusiasm among students. One of the most fulfilling aspects of my tenure has been coordinating and organizing events that not only celebrate the beauty of mathematics but also foster an engaging and inclusive environment for all members. Affine has been more than just a society; it has been a community where ideas flourish, friendships are built, and a shared love for mathematics unites us all. As I reflect on my journey, I feel proud of what we have achieved and excited for the society's future endeavors. To my team, mentors, and everyone who has been a part of this journey—thank you for making this experience so enriching.



VAISHANAVI SHARMA



KIRAN BISHNOI



VANSHIKA SOOD (FINANCE HEAD)



The journey as The Finance Head of Affine :- The Mathematics Association of Daulat Ram College has been a remarkable memory indeed. As I complete my tenure I reflect on a journey full of challenges, growth and valuable learning. From the early days of strategic planning navigating periods to of uncertainty, this experience has provided immense personal and professional enrichment. Working with an exceptional team, I've learned the value of collaboration, resilience, and shared goals. The relationships built and the impact of our hard work will always remain close to me. I am grateful for the trust and support I received. Though my term ends, my commitment to our mission endures. Thank you for this honor.



NEHA RAJPUT



VANSHIKA GUPTA (CONTENT HEAD)



Writing for Affine yet again this year has been a privilege. This position has given me an experience like no other. This year was truly a spectacular one in terms of the workshops, seminars and competitions. Helping organise and writing for each event has given me a newfound perspective about my writing skills and has also assisted me in improving them over the course of the year. There have been so many challenges, opportunities and memories along the way. We have collectively endeavored to create educational materials that are both academically rigorous and pedagogically sound, fostering a deeper comprehension of mathematical concepts. I am confident that the department will continue to uphold its commitment to academic integrity and the advancement of mathematical understanding.



SWASTIK

Talk Session

HYMNS IN YAJURVEDA, ARITHMETIC, GEOMETRY AND ITS APPLICATIONS

Affine: The Association of Mathematics Department, Daulat Ram College revived this new session with a talk on the topic: Hymns in Yajurveda, Arithmetic, Geometry and its applications. Bringing to light these traditional methods of practicing mathematics would provide the students with a new outlook towards the field. On the morning of 20th September, 2024, the students from the department gathered in the Conference Hall, Sadhbhawna Bhawan. The talk began at 10 A.M. Our Guest Speaker for the day was Professor Rajendra Prasad Pant from Kumaun University, Nainital.



Sir is a highly accomplished personality who has been a part of numerous eminent editorial boards, delivered lectures in various other countries and has been awarded with the National Scholarship of Government of India. He was felicitated by, Dr. Seema Khurana.



During this informative session, sir also introduced numerous other related topics which turned out to be extremely absorbing for the students present there. These included the golden ratio and the mention of several ongoing researches in his present field.

To make the session interactive as well as student-friendly, Professor Rajendra also solved numerous relevant examples step-by-step. He piqued the students' intrigue which was clear from the questions during the following Q&A session. The event was successfully brought to a close with a thank you note addressed to our Principal Dr. Savita Roy Ma'am, Convenor Dr. Astha Chauhan and Co-Convenor Ms. Sapna Kumari Meena.



Seminar

ACTUARIAL SCIENCE

IN COLLABORATION WITH ACTUATORS EDUCATIONAL INSTITUTE



Affine: The Association of Mathematics Department, Daulat Ram College, organized a seminar on the topic: Actuarial Science. The objective was to give a detailed explanation about Actuarial Science and what kind of lifestyle an Actuary lives.

On the morning of 24th September, 2024, students from various departments gathered in the Conference Hall, Sadhbhawna Bhawan. The session began at 10 A.M. We had Miss Shivangee Agarwal from IIM Indore who is a renowned Actuary as the host speaker. She is a Qualified Actuary with a Masters in Data and Business Analytics. Dr. Shelly Verma felicitated our esteemed guest of the day.

During the session, Shivangee Ma'am gave a detailed outlook as to what Actuarial Science is all about. She added day-to-day anecdotes to make this session a relatable and interesting one. In addition to speaking about various insurance policies and the way an Actuary can shape the financial system of India compared to other countries, Ma'am also enlightened the students regarding the significance of an Actuary.



Later, she explained the workings of the examination of Actuarial Science and what criteria a person needs to fulfill to be an Actuary. As the session proceeded, students had a Q&A session with Ma'am. The event was successfully ended with a thank you note addressed to our Principal Dr. Savita Roy, Convenor Dr. Astha Chauhan and Co-Convenor Ms. Sapna Kumari Meena.

Seminar

CAREER IN FINANCE

IN COLLABORATION WITH SGT UNIVERSITY

Affine: The Association of Mathematics Department, Daulat Ram College, organized a seminar on the topic: Career in Finance. The objective of the seminar was to give a detailed explanation about the different career options available related to finance and how a student from any background can make a good growing career in this sector. On the morning of 11th February 2025, students from the mathematics department gathered in the Conference Hall, Sadhbhawna Bhawan.



The session began at 11 A.M. We had Dr. Gunjan Tripathi, a faculty from SGT University who is an accomplished academician, researcher, and corporate professional with over 15 years of experience in banking, finance, HR, and operations, complemented by 8+ years in academia. The students had a very interactive session with Gunjan Ma'am as she started the session with the importance of Financial Management in context of various industrial giants which eventually grabbed the attention of the crowd. She explained about the various career opportunities available in finance and how it can be chosen by a student currently pursuing mathematics.



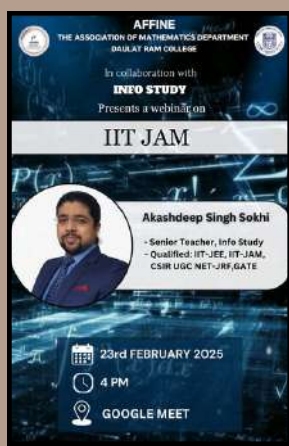
She thoroughly guided about the risks as well as the benefits related to finance. A Quiz Round gave rise to anticipation amongst the crowd as there was an air of competitiveness. As the session proceeded, students had a Q & A session with ma'am. The event was successfully ended with a thank you note addressed to our Principal Dr. Savita Roy, Convenor Dr. Astha Chauhan and Co-Convenor Ms. Sapna Kumari Meena.



Webinar

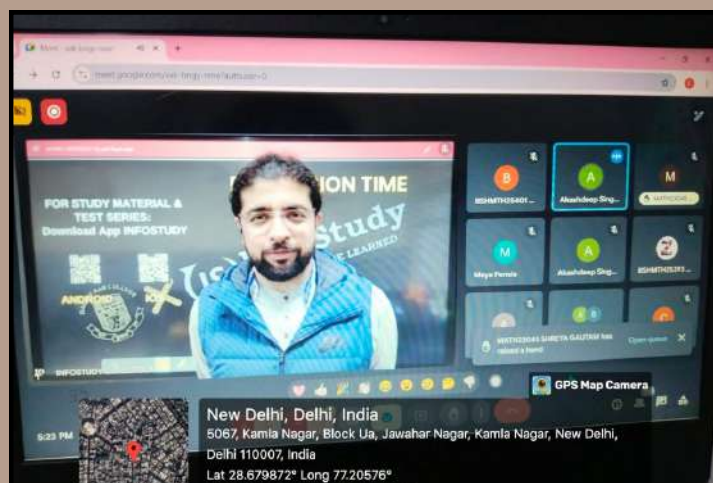
IIT JAM

IN COLLABORATION WITH INFOSTUDY



The afternoon of 23rd February, 2025 was marked by a webinar organised by Affine: The Association of Mathematics Department, Daulat Ram College in collaboration with InfoStudy. The session revolved around cracking the prestigious IIT JAM examination with respect to Mathematics and began at 4:00 P.M. The Guest Speaker for the day was Mr. Akashdeep Singh Sokhi, Senior Teacher at InfoStudy who has qualified IIT-JEE, IIT-JAM, CSIR UGC NET-JRF.

Sir captured the attention of his audience by discussing the emergence and importance of mathematics in various fields like Masters, UGC NET and UPSC. He focused on the problems that students generally face while preparing and provided solutions with his experience and expertise. Sir provided with success stories of students in order to motivate them. He also elaborated upon various options for research in Mathematics at various IITs.



In mathematics, the journey is often more beautiful than the answer.

A discussion session succeeded the seminar where students were able to clear their doubts and queries. The seminar was successfully ended with a thank you note addressed to our Principal Dr. Savita Roy, Convenor Dr. Astha Chauhan and Co-Convenor Ms. Sapna Kumari Meena.

Presenting

SHOONCH '25

INVITED TALK

5th
MARCH
2025

DAULAT RAM
COLLEGE
DELHI
UNIVERSITY

10:00 AM



"To those who study the beauty of mathematics, they find that the answer is never the end of the journey but merely a stepping stone to the next deeper question."

With this enthusiastic spirit, Affine- The Association of Mathematics Department headed forward with Shoochny'25 : The Departmental Annual Event. With every single individual being enthusiastic, we began the morning of 5th March 2025 with full spirit and anticipation. To ignite the mathematical curiosity, we had an exciting talk session that promised to take us on a journey beyond textbooks and formulas and it actually did the very same.



We had the honor of welcoming our guest speaker, Prof. (Dr.) Arvind Patel, from the Faculty of Mathematical Sciences, University of Delhi. He delivered an engaging session on the topic "Well-Posed Problem in Differential Equation." It was a valuable opportunity to learn from his expertise.

Presenting

SHOONAY '25

MATHSHOT 3.0

The event that followed was MathShot 3.0. As anticipated, participants from different colleges of different years took part in this competition. They took mind blowing pictures for the competition and explained the mathematical concept behind them in a very well-mannered way. Our judges were highly impressed by their skills and it was difficult for them to choose our three winners. The winners were as follows:

- 1st prize -Edha, Malvika
B.Sc.(H) Mathematics- Daulat Ram College
- 2nd prize - Rineeka Attri, Ayan Ashraf
B.Com.(H)- Sri Ram College of Commerce
- 3rd prize- Tie b/w
Sharad
B.A.(H) English- SGND Khalsa College
&
Akshas Ghawri, Varun Singh
B.Sc.(H) Mathematics- Hansraj

They were given cash and kind prizes at the end of the event.



Delhi, Delhi, India
M6q4+359, Sant Kirpal Singh Marg, Daulat Ram Co
C, Maurice Nagar, Roop Nagar, Delhi, Delhi 110007,
Lat: 28.087821° Long 77.205278°
05/03/2025 10:47 AM GMT +05:30



Presenting

SHOONAY '25

LOG-AD-RITHM



We had another wonderful event that is Log-Ad Rithm. It was an event of marketing with a blend of Mathematics. It was a unique event and creativity knew no bounds in it as the participants portrayed various character to advertise their product. The audience was captivated by the wonderful strategies that the participants took within 5 minutes to make place in the winning list. The judges were highly impressed and choosing the winners was a difficult task to perform.

Finally, the winners were revealed and they were as follows:

- 1st prize- Tanishka, Suhana
B.Sc.(H) Mathematics ,Daulat Ram College
- 2nd prize- Saim, Madhav Mehta
Shaheed Bhagat Singh College
- 3rd prize- Mansi Singh
B.Sc.(H) Mathematics, Daulat Ram College

Our winners and participants were awarded with various cash and kind prizes.



Presenting

SHOONYA '25

THE INFINITY STAGE

Adding to this wonderful event, we had Infinity Stage Challenge: A platform for Raw Talent. It was a very fun event and many participants took part in this challenge. There was an array of skills which included dancing, singing, acting, poetry and our audience had a very great time looking at them and their creativity. The event was the spotlight of Shoonya'25 as it shook the stage with dynamism and very high energy. The final verdict for the event was as follows:



- 1st prize - Vikas Sharma
B.A. Program- PGDAV College
- 2nd prize - Kavya Singh
B.Sc.(H) Mathematics- Daulat Ram College
- 3rd prize- Kunal Taneja
B.Sc.(H) Mathematics- Hindu College



Our winners and participants were awarded with various cash and kind prizes.



Presenting

SHOONY '25

CRYPTIC CODE HUNT

While the Infinity Stage was going on, we simultaneously had Cryptic Code Hunt at its peak on the other side. There were many teams who were all enthusiastic to embark on this exciting journey. The event covered the entire campus area where various clues were hidden and participants had to decipher the riddles to move on to the next round. Our participants were spread all around and hence it was a very insightful view to look upon. The efforts were highly appreciated by the audience as well as the judges. Finally, the results were revealed for the same. Our winners were as follows:



- 1st prize- Team Limit Breakers
Manik Bameta, Yashita Sharma
B.Sc.(H) Mathematics- Hindu College
- 2nd prize- Team S True Guys
Mahak Sharma, Kishan Yadav, Prashant Jatav
B.Sc.(H) Physics- Ramjas College
- 3rd prize- Team the Three Musketeers
Ankush, Manan Lohiya, Sumit
B.Sc.(H) Mathematics- Hindu College

They were given cash and kind prizes at the end of the event.



Presenting

SHOONYA '25

SKETCHY-GUESSERS

AFFINE
THE ASSOCIATION OF MATHEMATICS DEPARTMENT
DAULAT RAM COLLEGE
presents
THE ANNUAL FEST
SHOONYA '25
SKETCHY GUESSERS
Draw, guess, and race against time in this
Pictionary challenge

5th MARCH 2025
12 NOON ONWARDS
RANGSHALA,
DAULAT RAM COLLEGE

Scan here to REGISTER

Prizes worth upto 1 lakh*

LAST DATE TO APPLY: 3rd MARCH 2025 TILL 5:00 PM

OUR SPONSORS:

EVENT HEAD SWIKRITI (8307499848) FOR QUERIES, CONTACT US: EVENT HEAD NILAXI (7310501042)

Adding to this event, we had Sketchy Guessers : Pictionary Competition. It was a very fun event and participants actively took part in this challenge. The game asked the participants to guess the pictures only with the help of mathematical terms and symbols which made it even more interesting. The participants as well as the audience had great time during this event. Not just the participants, but even our teachers took part in this game and thoroughly enjoyed this interesting experience

The winners and participants of the game were honored with a combination of cash prizes and valuable gifts as a token of appreciation for their enthusiasm and efforts.



Presenting

SHOONY '25

MATHEMATI-CLIPS

Covering the entire event, was our digital team as well as the contestants from the Mathemati-clip (reel-making competition) held throughout the event. Participants were to prepare a short clip up to a maximum time limit of one minute and thirty seconds. From several contestants the one who won hearts on our social media handle is:

Suhani Tandon
B.A.(H) History
Daulat Ram College



The winners for all the segments were awarded with cash prizes by our respected judges. And with that, we wrapped up yet another fantastic Departmental Annual Event. The aim was to provide a platform for the students to come forth with their mathematical skill and prowess and was entirely fulfilled through Shooony '25.

IS IT ETHICAL FOR MATH STUDENTS TO USE AI?

~L. SHUBANGI

As the use of AI in math education increases, there are significant ethical considerations. With AI, students can be helped with solving problems, learning concepts, and even completing assignments. But over-reliance on AI without actually learning the concepts hurts a student's learning process. Mathematics is not just about getting answers; it's about critical thinking and problem-solving. If students rely on AI to do homework without studying the subject, they're missing out on learning critical skills. Academic integrity is an ethics concern. If a student presents work created by AI without claiming ownership, it's plagiarism. Referring to AI software, like all other sources, is necessary in order to maintain academic integrity. Schools and teachers must provide guidelines on using AI correctly to help students use it as an aid and not a replacement for their own effort. Although the above problems do exist, AI can be of assistance if

appropriately utilized. AI can help students learn difficult concepts, check their assignments twice, and learn other means of solving problems. The trick to do is use AI responsibly—students should try and solve the problems on their own first and use AI as a guide when needed. This way, AI can be a good helper rather than a crutch. With responsible use and good ethical guidelines, AI can be harnessed to make the most of learning while ensuring the students also develop problem-solving and critical thinking capacities.

PUZZLE SOLVING TRICK

~KEERTI

1. We can make every number from 1 to 100 by exactly using four 9s. Here is an example:-

$$1 = (9 + 9) / (9 + 9)$$

$$2 = (9 / 9) + (9 / 9)$$

$$3 = (9 + 9 + 9) / 9$$

$$4 = (9 / \sqrt{9}) + (9 / 9)$$

$$5 = \sqrt{9} + \sqrt{9} - 9/9$$

$$6 = (9 - 9) + 9 - \sqrt{9}$$

$$7 = \sqrt{9} + \sqrt{9} + 9/9$$

$$8 = 99/9 - \sqrt{9}$$

$$9 = (9 - 9) + \sqrt{9 \times 9}$$

$$10 = (99 - 9) / 9$$

2. The "Finding a Fake Coin" Trick – Minimum Weighings Required

You have 9 identical-looking coins, but one is slightly heavier or lighter. How do you find it in the fewest weighings using a balance scale

Trick: Use a divide-and-conquer approach:

1. Divide the 9 coins into 3 groups of 3.
2. Weigh two groups against each other.

If the scales balance, the fake coin is in the third group.

If they don't balance, the fake coin is in the heavier or lighter group.

3. Take the group with the fake coin and repeat the process with the remaining 3 coins.

4. In just 3 weighings, you can always find the fake coin!

THE MISSING DIGIT

I am a 3-digit number.
My tens digit is 5 more
than my ones digit, and
my hundreds digit is 8
less than my tens digit.
What number am I?

GREAT MATHEMATICIAN

~SWASTIK

Euclid (circa 300 BCE): He has been known as the "father of geometry,". Euclid wrote Elements: a book that organized geometry and math principles. His work influenced science and engineering for over 2,000 years.

Isaac Newton (1643–1727): Newton is famous for his laws of motion and gravity. He co-invented calculus and made major contributions to physics, math, and optics, especially in his book "Principia Mathematica".

Carl Friedrich Gauss (1777–1855): He is known as the "prince of mathematicians,". Gauss made key discoveries in number theory, statistics, and electromagnetism. His work on prime numbers and the Gaussian distribution is important in maths even today.

Leonhard Euler (1707–1783): Euler was a Swiss mathematician who made major contributions in areas

like topology and graph theory. He introduced key mathematical notations, like $f(x)$ and the number 'e'. His work is still used in modern engineering and mathematics.

Pierre-Simon Laplace (1749–1827): A French mathematician and astronomer, Laplace worked on the motions of planets and moons. He helped develop probability theory and Laplace transforms, which are used in engineering and signal processing.

THE MATHEMAGICIAN'S JOURNEY

~ ZAHEEN SHAHID

Title: "The Mathemagician's Journey: Unveiling the Hidden Patterns of the Universe"

Introduction: Imagine a world where numbers dance in harmony, where geometric shapes whisper secrets, and where algebraic equations reveal hidden truths. Welcome to the enchanting realm of mathematics, where the boundaries of reality are stretched and the imagination knows no limits.

Fibonacci odyssey: We begin our journey in the realm of numbers, where the Fibonacci sequence awaits. This mystical series of numbers, in which each digit is the sum of the two preceding ones, holds the secrets of nature's harmony. From the arrangement of leaves on a stem to the branching of trees, the Fibonacci sequence reveals the underlying order of the universe.

The Geometry of Dreams: Next, we venture into the realm of geometry, where shapes and patterns converge. We find ourselves lost in the labyrinthine corridors of M.C. Escher's prints, where geometry and art blend in a mesmerizing dance.

The Fractal Frontier: Now, we arrive at the frontier of fractals, where self-similarity and infinity converge. Here, we encounter the Mandelbrot set, a mathematical wonder that defies the boundaries of reality. As we explore the intricate patterns of fractals, we realize that the universe is a tapestry of infinite complexity, woven from the threads of mathematical truth.

Conclusion: Our mathematician's journey has come to an end, but the wonders of mathematics remain. As we return to our mundane lives, we carry with us the secrets of the universe, hidden in the patterns and structures of mathematics.

MATH'S TRICK

~SHRUSHTI JAIN

1. The Number 1089 Trick

Steps:

1. Choose any 3-digit number where the first and last digits differ by at least 2 (e.g., 753).
2. Reverse the digits (e.g., 357).
3. Subtract the smaller number from the larger one ($753-357=396$).
4. Reverse the result (693).
5. Add the result to its reverse ($396+693=1089$).

Result: You always get 1089!

2. Multiply Any Number by 11 Instantly

- Steps:**
1. Take any 2-digit number (e.g., 25).
 2. Add the digits together ($2+5=7$).

3. Place the sum between the original digits (275).
4. This works if the sum is less than 10. For larger sums, adjust accordingly.

Example:

$$36 \times 11 \rightarrow 3 (3+6) 6 \rightarrow 396$$

3. The Magic of 9s

Steps:

1. Choose any number (e.g., 57).
2. Multiply it by 9 ($57 \times 9 = 513$).
3. Add the digits of the result ($5+1+3=9$).

Result: Sum of the digits of any multiple of 9 equals 9.

4. Finding Square of Any Number Ending in 5

- Steps:**
1. Take a number ending with 5 (e.g., 35).
 2. Multiply the first digit by itself + 1 ($3 \times 4 = 12$).
 3. Append 25 at the end.

Result: $35^2 = 1225$

Can you solve this??
What three positive numbers give the same answer when multiplied and added together?

MATHEMATICAL FACTS

~ VAISHNAVI SHARMA

1. A 'jiffy' is an actual unit of time. It means 1/100th of a second.

2. The symbol for division (i.e. ÷) is called an obelus.

3. A perfectly even universe? – if you add up all the numbers from 1 to infinity, the result appears to be $-1/12$! This bizarre result has applications in quantum physics.

4. Euler's identity is called the "most beautiful equation" – it links five of the most important numbers in mathematics: $e^{i\pi} + 1 = 0$

5. A triangle can have more than 180° – in curved spaces (like on the surface of a sphere), a triangle's angles can add up to more than 180° , breaking a fundamental rule of euclidean geometry.

6. A chessboard has 204 squares, not 64 – if you count all possible squares of different sizes (1×1 , 2×2 ,

3×3 , etc.), the total is 204, not just the 64 small squares.

7. The golden ratio (φ) is everywhere – the number 1.618... appears in art, architecture, and even DNA strands. Many believe it represents the most aesthetically pleasing proportion.

8. A Googol 10^{100} (1 followed by 100 zeros) is bigger than the number of atoms in the universe.

Fun fact: The name "google" comes from "googol," reflecting the search engine's goal of handling vast amounts of information!

ACHIEVEMENTS

• INTER- COLLEGE COMPETITION



KAVYA SINGH

(3rd year)

- 1st prize- Kavita Pratiyogita
Mata Sundari College in Saarang'25
- 2nd prize- The Infinity Stage
Daulat Ram College in Shoo'25
- 3rd prize- Mehfil-e-Ghazal Competition
Mata Sundari College in Saarang'25



SUHANA

(2nd year)

- 1st prize- Log-ad-rithm
Daulat Ram College in Shoo'25
- 3rd prize- Inter-College Makti Phod
Competition
SGT University, Gurugram



MALAVIKA

(2nd year)

- 1st prize- Mathshot 3.0
Daulat Ram College in Shoo'25



TANISHKA VARSHNEY

(2nd year)

- 1st prize- Lod-ad-rithm
Daulat Ram College in Shoo'25



EDHA PULASTYA

(2nd year)

- 1st prize- Mathshot 3.0
Daulat Ram College in Shoo'25



VANSHIKA GUPTA

(2nd year)

- 3rd prize- Anushthaan'25
Delhi Technological University
during EngiFest'25

ACHIEVEMENTS



PRIYA

(2nd year)

- Winner of Best Cadet Competitions
-Kirori Mal College in CADET'25
- Lady Shri Ram College for Women in
Veerangana
- Hindu College



KHUSHI GUPTA

(1st year)

- 1st prize- Market Mayhem
Miranda House organised during Zenith-
The Annual Economic Conclave
- 4th prize- CAFTA's Case Championship
2024 in stream of Strategy and Innovation



SNEHA

(1st year)

- 1st prize- Prismatic: An
Extempore Competition
Daulat Ram College organised by
Pahal: The Gender Champion Cell

• INTERNSHIP / SCHOLARSHIP



VANI ARORA

(2nd year)

- Internship with The Aarambh
Organisation



SHREYA GAUTAM

(2nd year)

- Scholarship from The Young
Women's Association

ACHIEVEMENTS



TANISHKA VARSHNEY

(2nd year)

- Internship with Pehchaan-The Street School-Trust as Content Writing Intern

• OTHER ACHIEVEMENTS



SUHANA

(2nd year)

- Organized a Blood Donation Camp at Daulat Ram College
- Participated in Un-Armed Combat course "SASHAKTI" designed by Delhi Police North District

TEACHER NOTE

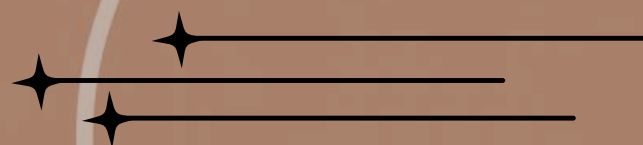
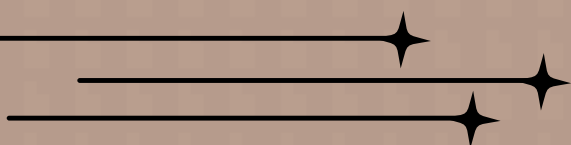
The journey through mathematics is a rewarding pursuit of knowledge and understanding. Mathematics actually is relevant and important in today's world.



Mathematics is a powerful way of thinking, both for understanding and for solving or helping to solve real-world problems. The formulas on a page are just representations. Mathematics is to symbols on a page as music is to notes on paper. If we don't have sufficient knowledge of math, we are ill equipped to understand things that affect us and to make good decisions to our advantage. Mathematics is constantly evolving field, with new discoveries and applications being made all the time. It's the fundamental tool for understanding and shaping our world.

Finally I just want to tell Mathematics is an interesting subject, which has applications in generally every field and in real life as well. If studied properly this is one of the most simple and easy subject. A good grasp over mathematics helps in developing the logical as well as problem solving ability of an individual. It also help to boost the confidence of an individual.

Dr. Umesh Kumari
Assistant Professor
Department of Mathematics



ALUMINI CORNER

where memories meet milestones



NEERAJ MOR

(CLEARED CDS WITH AIR 13)

Yes! Finally, my dream has come true. Those hours and hours that I spent in library, those feedbacks that I took from my family and friends about my personality, those efforts that I put to change myself to become Lt. Mor; have paid off.

I started my preparation for SSC from August 2021 when NDA was admitting girls for the very first time. This journey has completely transformed my life. In my first attempt for NDA, I could clear the written exam. At that time, I used to be that shy girl who used to hide when relatives visited us. So, in my interview, I could not even utter a single word to introduce myself. It compelled me to change my personality. I realized that, "In life, we don't get what we want, we get what we are." If I want to be Lt. Mor, I need to become Lt. Mor. Yes! I toiled for the past four years of my life with a lot of major setbacks but I persevered for years. In the second last attempt, I finally got recommended in interview but when I went for medical round, I found out that I have a serious health issue. For that I needed to undergo an operation. I could not attend any classes for one whole semester. Unfortunately, I missed the merit list by a close margin. Yes! life slaps me many times and compels me to deviate from what I wanted to become. It struck me really hard. Even after giving my best, it was never enough. But, I believed that one day I would be the deserving one and would embrace my dream. In my last attempt, I could not clear the interview. It was disheartening to accept the fact that I could not clear. But, yes! I didn't stop there. I started my CDS preparation from the very next day.

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where memories meet milestones

Finally, my journey ended with me clearing CDS in my first attempt with AIR 13. Yes! now I'm soon to be Lieutenant Neeraj Mor, the youngest officer of the whole batch.

To all my juniors, I would like to share a few lessons from my journey.

1) Nothing is impossible: It's quite common adage but it's something that I observe from my life too. When I went back to my school after clearing the exam, no one could recognize me. I'm still the same person but with completely different personality from the one that I used to be in school days. Yes! you can transform yourself utterly to become what you love to be.

2) Always learn from your mistakes: It's the main part of my four years of journey. I fell, I learned and I stood up again. It's not always easy to recognize our mistake and it's even tougher to correct it. But, it's the only way for your dream.

3) Be honest with yourself: You don't need to prove to the world that you are honest. But, never forget to be honest with yourself. You need to retrospect your journey often and keep an eye on your efforts whether you are giving your best or not.

4) Don't let others' opinion affect you: It might sound rigid and egoistic. But, if you keep on listening to others opinion, those noise will keep on distracting you and you will often find yourself questioning your ability. You can take feedback about your personality from your trusted family and friends but don't lend your ears to any negativity which make you feel you can not do it.

I would like to thank all my department faculty and Daulat Ram college as a whole for bringing me the opportunity to explore new people and ideas from different parts of the country that shape my perspectives of life. Last of all, I would like to wish all my juniors a successful life ahead.

ALUMINI CORNER

where memories meet milestones



HARIKA

**Former Vice President,
Affine- The Mathematics Association**

**(Master's Student, Mathematics and
Computing, Thapar Institute of Engineering
and Technology, Patiala)**

Being a part of Affine- Mathematics Association has been an incredible and transformative journey. Witnessing its remarkable growth by the time we stepped into our roles was truly inspiring. Serving as the Vice President for a year was not just a responsibility but an opportunity that allowed me to contribute to a community deeply rooted in mathematical excellence.

It provided me with a platform to step beyond my academic pursuits, fostering both personal and professional growth. It served as a safe space, offering the freedom to engage with mathematics beyond textbooks, collaborate with like-minded individuals, and build meaningful connections. The experience of leading and working alongside such a talented group of individuals was immensely fulfilling.

I sincerely hope that Affine continues to guide and inspire future members, upholding its tradition of nurturing mathematical curiosity and excellence. The respect, friendships, and experiences I gained here will always remain invaluable. I look forward to revisiting the department and witnessing its continued success.

Thank You!

ALUMINI CORNER

where memories meet milestones



KANCHAN BHARTI

**(Pursuing M.Sc. Mathematics, IIT
Kanpur, 2024-26)**

Looking back at my time at Daulat Ram College, I feel immense gratitude for the experiences, learning, and connections I made during those years. The Department of Mathematics was more than just a place of academic growth—it was a community of supportive teachers and enthusiastic students who made every moment worthwhile.

My time at Daulat Ram College was truly enriching, thanks to the supportive faculty, and a vibrant student community. Being part of Affine – The Mathematics Association as the Social Media and Digital Head was one of my best decisions. It not only gave me exposure but also helped me build leadership skills, manage events, and connect with peers and professors.

I highly encourage my juniors to actively participate in department activities, as they provide valuable experience beyond academics. Currently, pursuing my MSc in Mathematics at IIT Kanpur, I realize how our professors' guidance plays crucial role in our academic and professional journeys. The final year is particularly significant, so I will say to my juniors that set your goals and work consistently towards them.

Wishing you all success in your endeavors!

ALUMINI CORNER

where memories meet milestones

CHHAYA TIWARI

(JAM rank holder- AIR 234)

From a pre conceived notion that science department is not good enough at DU to being under the guidance of the most fabulous faculty is my journey in the Mathematics department of Daulat Ram College.



In all started with online classes for first semester where the classmates were helping and teachers were diligent. As time passed, I entered the premises of the college with little enthusiasm and lots of nervousness. I felt girls college would refrain my overall development, but what actually happened was me landing upon ample of wonderful opportunities and people. I had interest in Mathematics during my school days, but getting the gist and profoundness of it came after having insightful class interactions with the faculty at DRC.

Of everything bright present in the Mathematics department, the best was that faculty was always more excited than the student herself for her success.

To sum in all, each day in Mathematics department of DRC was fun, fascination and fulfillment.

At last, I extend sincere gratitude to teachers as well as wish Affine family to grow more vibrant and be testimony for the generations to come.

Regards,
Chhaya Tiwari

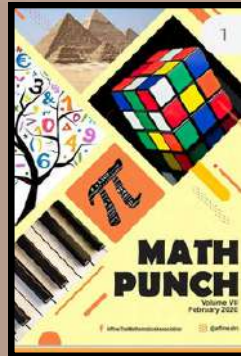
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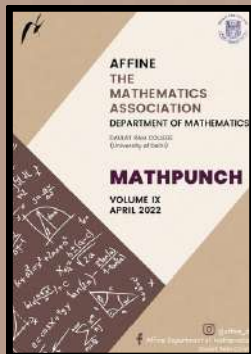
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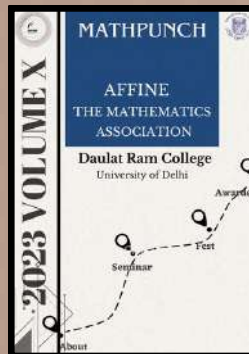
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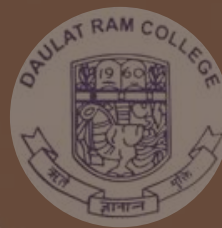
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