Time (Day)	Speaker(s)	Title	Abstract
09:00 (T)	Muzaffer Kaan Dinç	*Numerical Integration*	*Numerical ıntegration and their error formulas*
09:30 (T)	Zeynep Nur Karaca	*The Infinite Money Game: A Mathematical Analysis*	*I studied Stirling numbers separately and focused on Catalan numbers to solve Ali Nesin's questions. I used Python code to fill the table in the question and conducted a combinatoric analysis. My project highlights mathematical exploration through coding and combinatorial problem-solving.*
10:00 (T)	Asel Aydın	*Properties of Generalized Bezier Curves*	*Bezier, Curve, q-Bezier*
10:00 (T)	Sena Büyükdoğan	*Properties of Generalized Bezier Curves*	*Bezier, Curve, q-Bezier*
10:30 (T)	Sabri Bozkurt	*Comparison of Some Numerical Integration Methods*	*Numerical integration methods are techniques used to obtain detailed results when a definite integral is difficult to solve analytically. Basic constraints such as the trapezoidal method and Simpson's method calculate the area by decomposing the function, while less complex operations such as Gaussian Quadrature are preferred. By comparing these methods, it is determined which one is obtained with a closer result in real terms.*
10:30 (T)	Sena Çetin	*Comparison of Some Numerical Integration Methods*	*Numerical integration methods are techniques used to obtain detailed results when a definite integral is difficult to solve analytically. Basic constraints such as the trapezoidal method and Simpson's method calculate the area by decomposing the function, while less complex operations such as Gaussian Quadrature are preferred. By comparing these methods, it is determined which one is obtained with a closer result in real terms.*
11:00 (T)	Nur Sena Özdere	*Fundamentals of Cryptography and Applications of the Laplace Transform to Croptography*	*I explained the most used methods of cryptology in the first part of the project. Then I examined encryption using Laplace Transform.*
11:30 (T)	Deniz Öter	*A Characterization of Galois Extensions*	*Defining the Field extension and Artins Theorem. Introduction to Galois theory. Characterize a Galois Extension.*
12:00 (T)	Selin Sucu	*On Algebraic Cryptology Methods and Its Applications*	*Examine the mathematical foundations of modern and classical algebraic cryptology methods such as AES, Hill Cipher, RSA and El-Gamal. Analyze the mathematical operations that explain the encryption and decryption processes of these algorithms.*
12:00 (T)	Subutay İldeniz Demir	*On Algebraic Cryptology Methods and Its Applications*	*Examine the mathematical foundations of modern and classical algebraic cryptology methods such as AES, Hill Cipher, RSA and El-Gamal. Analyze the mathematical operations that explain the encryption and decryption processes of these algorithms.*
12:30 (T)	Ela Karbuç	*Mathematical Animations Using Manim*	*This project explores the use of the Manim Python library to create mathematical animations that visually represent abstract mathematical concepts. By utilizing educational resources and experimenting with the library's tools, the project emphasizes fundamental operations such as translation, rotation, and scaling, as well as advanced visual proofs and set operations.*
15:30 (T)	Umut Özen	*3D animate with python*	*3D animate with marlin g-codes in python*
16:00 (T)	Çağdaş Çiğdemoğlu	*Cardano's Formula and Casus Irreducibilis*	*Cardano formulas, The discriminant of cubic polynomials, Casus Irreducibilis*
16:30 (T)	Mustafa Eren Taşlı	*Symmetric Polynomials, Newton's Identities, Discriminants and Resultants*	*I learned symmetric polynomials-elementary symmetric polynomials and prove Fundamental theorem of symmetric polynomials. I learned how to express the sum of powers of the indeterminates as polynomials in terms of the elementary symmetric polynomials with Newton identities. ı learned how to compute discriminant of an n-th degree polynomial without finding its roots.*
Time (Day)	Speaker(s)	Title	Abstract
10:00 (F)	Suhap Bektemir	*Implementing RSA in Python*	*This project explains what the RSA algorithm is in cryptography and shows how to implement this algorithm to encrypt and decrypt messages using Python.*
10:30 (F)	Özlem Nur Dalar	*Markov Chains*	*General information about Markov Chains. It will show how to calculate it and an example of it.*
11:00 (F)	Serhat Balaban	*Game Theory*	*Game theory is a mathematical discipline that studies the strategic interactions of decision-makers. It analyzes how the decisions of individuals or groups influence the behavior of others and the strategic outcomes that emerge from these interactions. It is applied in various fields, including economics, biology, politics, and engineering.*
12:30 (F)	Yahya Tutmaz	*Kalkülüs Tarihi*	*This project examines the historical development of calculus by analyzing the contributions of the most influential scientists in chronological order. It aims to explore how the fundamental concepts of calculus evolved and their impact on scientific advancements within a historical context.*
13:30 (F)	Tuba Kerimoğlu - Asya Aleyna Yılmaz	*Applications of Markowitz Portfolio Theory on BIST 100*	*We created a portfolio from BIST100 stocks using the Markowitz Portfolio Theory. The objective was to achieve maximum returns with minimum risk. While preparing this project, we utilized Excel.*
14:00 (F)	Dilşat Sesli	*Simplical complexes*	*In this project, we study the relationship between simple complexes and h-vectors, focusing on their combinatorial properties for commutative algebras. We observe that h-vectors provide fundamental combinatorial and algebraic information for commutative algebras.*
14:00 (F)	Ekin Yağcıoğlu	*Simplicial Complexes*	*In this project, we study the relationship between simple complexes and h-vectors, focusing on their combinatorial properties for commutative algebras. We observe that h-vectors provide fundamental combinatorial and algebraic information for commutative algebras.*
14:30 (F)	Fatih Özdemir	*Advenced Option Pricing Models And An Application On Green Stocks*	*The project titled "Advanced Option Pricing Models and Application on Green Stocks" aims to theoretically address advanced option pricing models such as Black-Scholes, Binomial Tree and Monte Carlo Simulation and apply these models to the shares of companies that produce sustainable energy and operate in an environmentally friendly manner (green stocks). Within the scope of the project, pricing models will be implemented using software such as R and Excel and financial analysis of green investments will be conducted. This study aims to contribute to sustainability-oriented approaches in both academic and financial decision-making processes.*
15:00 (F)	Özge Nur Baş	*Outstanding Loss Modeling*	*This study aims to more accurately predict future loss liabilities in the insurance industry by discussing loss reserve calculation methods in insurance . For this purpose , different modeling methods such as the classical Chain Ladder and Bornhuetter-Ferguson methods were used in the project.*
15:30 (F)	Asude Yaren Çetin	*Darboux motion*	*The motion of rigid bodies in planar, spherical, and three-dimensional spaces is defined. The kinematic properties of Darboux motion, including velocity twist , acceleration, and pitch, will be examined.*
15:30 (F)	Deniz Karaman	*Darboux Motion*	*The motion of rigid bodies in planar, spherical, and three-dimensional spaces is defined. The kinematic properties of Darboux motion, including velocity twist , acceleration, and pitch, will be examined.*
15:30 (F)	Metin Kutluca	*Darboux Motion*	*The motion of rigid bodies in planar, spherical, and three-dimensional spaces is defined. The kinematic properties of Darboux motion, including velocity twist , acceleration, and pitch, will be examined.*