

# Math Fair Qualifiers from March 1, 2019

## Bethpage HS

Channapatna	Ruchitha	9	Trinomial and Multinomial Theorems
Channapatna	Suchitha	9	Diophantine Equations

## Candlewood MS

Chandra	Viti	8 Team A	The Mathematics of Relativity in Astronomy
Eisenberg	Ellis	8 Team A	The Mathematics of Relativity in Astronomy

## Clarke HS

Panickssery	Arjun	11	The Mathematics of Voting
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## Copiague HS

Falco	Joseph	9	Game Theory's Real Life Applications
Ismael	Zaiba	9	Probability I Genetic Disorders
Mendoza-Rodriguez	Myra	9	Proving Heron's Formula

## Copiague MS

Sztabinski	Alice	8	Math and Space
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## East Meadow HS

Caceres	Joaquin	11	Fluid Dynamics
Fong	Alyssa	11	Statistical Analysis in Pancreatic Cancer Research
Froehlich	Vanessa	11	Calculus
Pienkowski	Mateusz	11	The Mathematics of Snowflakes

## East Moriches MS

Sitzmann	Megan	8 Team A	Mathematical Paradoxes
Tully	Emily	8 Team A	Mathematical Paradoxes

## Elmont Memorial HS

Ahmed	Raheel	8	Eulers Number
Blanfort	Marthe	9	Binomial Theorem
Nnabuogor	Nneka	9	Geometry in Nature
Agesin	Akinwale	10	Mysteries of Zero

## Finley MS

Polinsky	Olivia	7	Probability in Genetics
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## Friends Academy

Barry	Ella	10	Rowing: The Mathematics of the Force Curve
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## Garden City HS

Grlc	Mary	9	Fractals in Music
Wu	Aidan	9	The Patterns in Pascal's Triangle
Zheng	Jenny	9	Hilbert's Hotel Paradox
Bailey	Ian	10	Mathematics in Juggling
Padala	Ryan	10	The Likelihood of Physical Perfection and an In-Depth Look at the
Riceman	Andrew	10	Sudoku Puzzles and their Solutions
Treanor	Robert	10	The Mathematics Behind Reaching the Speed of Light
Wu	Sarah	11	Thinking Outside the Bach: Music with Sinusoidal Graphs
Young	Jillian	11	How does Wind Affect the Speed of a Sailboat

## Great Neck North HS

Gruber	Danielle	10	A Comparison of Models for Evidence Accumulation
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**Half Hollow Hills HS West**

Su	Nina	9	Birthday Paradox
Sacchetti	Sophia	11	Probability and Gambling

**Herricks HS**

Balasubramanian	Aadithyaa	9	Genetics and Statistics
Kang	Genesis	9	Asymmetric and Symmetric Cryptography
Khondkar	Wafiq	9	Integral Calculus
Patnam	Pranati	9	Matrices and Computer Graphics
Soni	Keneil	9	Game Theory Within the European Union
Zovko	Christopher	9	Conditional Probability and Bayes' Theorem
Koe	Justin	10	Machine Learning for Statistical Analysis
Lakshmanan	Haritha	10	Quaternions
Rasheed	Arfan	10	Octonions
Hsu	Carrie	11	Fourier Series
Martin	Jared	11	Computer Graphics

**Herricks MS**

Apostolatos	Melina	7	Cryptology
Chan	Preston	7	Game Theory
Huang	Connie	7	Modular Numbers
Karunakar	Vishnitha	7	Prime Numbers
Lo	Ryan	7	Conic Sections
Patel	Khushi	7	Pascal's Triangle
Abraham	Jacob	8	Suspension Bridges
Chheda	Zachary	8	Math and Basketball
Gondal	Ammar	8	Topology
Jha	Ankita	8	The Golden Ratio
Lam	Ashley	8	Pascal's Triangle
Lee	Jeylin	8	Math in Volleyball
Mendez	Alexa	8	Math in Medicine
Nabi	Sanyah	8	The Golden Ratio
Rams	Hannah	8	Tessellations
Saini	Rushil	8	Laws of Sine & Cosine
Shah	Ashay	8	Fibonacci Numbers
Yang	Mitchell	8	Magic Squares

**Hicksville SD**

Bachhal	Birinder	7	Fibonacci Sequence
Gupta	Pearl	7 Team B	Pascals Triangle
Walia	Jia	7 Team B	Pascals Triangle
Agarwal	Siddh	7 Team C	Cryptology
Raval	Parikej	7 Team C	Cryptology
Ashraf	Sara	8	The golden ratio
Malayil	Pratiksha	8	Predicting House Prices using linear regression
Jain	Aryan	9	Mathematical Cosmology
Jin	Xiang	9	Network Theory
Singh	Ekam	9	Binomial Theorem
Anugu	Adith	10	Game Theory

Singh	Navpreet	10	Planck's Constant
Sonika	Aniket	10	Codes and Ciphers
Gupta	Sejal	11	Neural Network
Jain	Viveka	11	Banach - Tarski Paradox
Mehta	Somya	11	Math behind Sudoku
Munn	Laura	11	Polar Coordinate System
Naqvi	Alina	11	Set Theory
Nasari	Alaha	11	Game Theory
Shamim	Fawziyah	11	The Analysis and Application of the Probability Theory
Sivasankaran	Dhanush	11	Banach - Tarski Paradox
<b>Holy Trinity HS</b>			
DeGeorges	Mia	9	Math in Astronomy
O'Brien	Kassandra	9	Pascal's Triangle
Shebar	Arianna	9	Chinese Remainder Theorem
Roccanova	Isabella	10	A Look Back Using Bayesian Statistics
<b>ICPS</b>			
Arengo	Maya	10	Infinity
Arengo	Uma	10	Fractal Analysis
Joseph	Victoria	10	Imaginary Numbers
Kampta	Seth	10	Math in Music: Fuzzy Matching
Manevitz	Matthew	10	Spherical Geometry
Narayan	Rithika	10	Area of Irregular Curved Shapes
Serban	Michelle	10	Factoring & Fibonacci
Valagolam	Davesh	10	Trisecting an Angle
Lampert	Lance	11	Exploring Parabola & Ellipse-like Loci with Mutated Foci
Yang	Madeline	11	Prove Monte Carlo
<b>Jericho HS</b>			
Chaudhary	Pratim	10	RSA Encryption Mathematics
Hu	William	10	Fuss-Catalan Numbers
Li	Joanne	10	Analysis & Modification of an Outbreak Prediction Model
Ma	Edgar	10	Graph Theory
Ren	Richard	10	Predicting Air Pollution in Beijing Using Regression Analysis
Shah	Vyom	10	Self Driving Cars
Wang	Jie Rui (Grace)	10	Prisoner's Dilemma
You	Daniel	10	Modeling a Rubik's Cube with Group Theory
Zhou	Judy	10	Optimal Velocity & Distance from Earth to GEOs
Chen	Austin	11	Strategies to Combinatorial Games
Dharia	Sohil	11	Using Collatz Conjecture for Fibonacci Numbers
Pietraski	Miranda	11	Computer Modeling of Planetary Motion
Sinnan	Keertti	11	Predicting Bite Force in Mammals
<b>Jericho MS</b>			
Pahlavan	Natalia	8	Solving for Area of Irregular Shapes
<b>Kennedy HS</b>			
Altstaedter	Alyssa	10	Josephus Problem
Benson	Sean	11	Fourier Series
Casale	Anthony	11	Applications

Cheung	Kyle	11	Markov Theory
Diaz	Juliana	11	Hall's Marriage Theorem
Futterman	Amanda	11	Koch Snowflake
Gera	Atul	11	Menger's Sponge
Kim	Minjee	11	Freemish Crate
Kim	Ryan	11	The Pappus Chain
Smith	Russell	11	Peasent Multiplication Application
Song	Jaehyeon	11	Ford Fulkerson Algorithm
Taub	Allison	11	Fermats Last Theorem
Totala	Kreena	11	Generate Polygonal Numbers
Vathappallil	Pravin	11	Viviani's Curve
<b>Lawrence HS</b>			
Bukhari	Syed Maja	9	Dandelin Spheres in Blood Spatter
Dagrin	Ileana	9	Napolean's Theorem
De La O	Stefany	9	The Shape of Space
Domanas	Gabrielle	9	Music Theory
Lizama Palma	Stephany	9	Projectiles in Video Games
Michlig	Audrey	9	Math in Music
Urgen	Ilia	9	Indirect Measurements & Similar Triangles
<b>Long Beach MS</b>			
Arengo	Rio	8	The Math Behind Bitcoin
<b>Manhasset HS</b>			
Giannakopoulos	Despina	9	The Golden Ratio
Hahn	Andrew	9	Moneyball: The Sabermetrics
LoCurto	Jillian	9	Juggling Mathematics
Magas	Ante	9	The Perfect Free Throw
Newman	Ashley	9	Magic Squares
Vorillas	Peter	9	The Perfect Free Throw
Harragan	Emily	10	The Importance of Prime Numbers
Pidherny	Kyria	10	The Mathematics Behind a Rainbow
Kiley	Matthew	11	The Mathematics Behind the Expanding Universe
Park	Dohyeon	11	Nine-Point Circle
Ryan	Charlotte	11	Mathematics of Tic-Tac-Toe
<b>North Shore Hebrew Acad HS</b>			
Hakakian	Alia	11	Mass Point Geometry
<b>North Shore HS</b>			
Lamond	Olivia	9	An investigation of 5-con triangles and other $(2n - 1)$ -con n-gons
Blumenthal	Sophie	10	Line reflections and associated rational functions
Weber	Kelly	10	An equation for dilations
Reilly	Esme	11	Trigonometric parallax
<b>North Shore MS</b>			
Lee	Noah	7	Game Theory
Levin	Harrison	7	Rubik's Cube
<b>Northport HS</b>			
Connor	James	10	Computer Generated Cities
Kavrakis	Valia	10	Probability

**Oceanside HS**

Visconti	Sarah	11	The Voting Theory
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**Roslyn HS**

Burns	Jared	9	Code Division Multiple Access
Christenson	Luke	9	Statistical Analysis
Gross	Madison	9	Ailles Rectangle and Speical Triangles
Guillon	Luca	9	Shoelace Method
Kessler	Ethan	9	Combinatorics
Kim	Yeji	9	Recursive
Kuturoff	Benjamin	9	Probability of Hitting the Bullseye in Darts
Kwon	Madison	9	Perspective
Levine	Bennett	9	Inscribed Shapes
Lind	Liam	9	Statistics in the Classroom
Litvack	Ian	9	Combinatorics
Mazarin	Ashley	9	Math Behind Animations
McNair	Laura	9	Physics of Badminton
Milholland	Aidan	9	Math in Art
Nercessian	Olivia	9	Newtons Method
Rice	Michael	9	30 Vector Planes Utililized in Physics
Sehgal	Harshita	9	Playing Card Combinatorics
Shah	Mahi	9	Inscribed Figures
Stam	Rylie	9	Probability
Sung	Emily	9	Music in Math
Tofafarosh	Ammar	9	Math Behind Crytocurrency
Valauri	Sophia	9	Musical Tuning Systems
Mayourian	Jacob	10	Probability and Strategies in Darts
Weisman	Sydney	10	Hypotrachoids

**Roslyn MS**

Goodman	Cole	7	Sabermetrics
Gross	Jacob	7	Matrices
Lee	Jacob	7	Math of Origami
Lee	ZeJane	7	Trigonometry
Shen	Cayden	7	Math Behind a Tennis Serve
Winston	Michael	7	Fractals
Yeh	Stephanie	7	Math in Animations
Youn	Hanah	7	Math in Music
Zwerling	Jacob	7	Bayes Theorem
Bogatyryova	Masha	8	Fractals
Fasanello	Robert	8	Exterior Angle Theorem
Fliegler	Matthew	8	How Pilots use Trigonometry to Fly planes
Garmise	Eliza	8	Math & Rollercoasters
Gerber	Harry	8	Geometry
Lam	Kristi	8	Math in Finance
Lee	Christian	8	The Binomial Theorem
Liswood	Amanda	8	The Mathematics of the Flu
Mashkevich	Lemuel	8	Special Triangles

Schwartz	Mac	8	Limits and Derivatives
Sen	Shirmoyee	8	Visualizing Math through Geospatial Technology
Shih	Wayne	8	Pyramids
Sinha	Arya	8	Magic Hexagons
Weisman	Sophie	8	Objects Viewed in the Front Window of a Car
Berger	Jaiden	8 Team A	Game Theory
Nabavian	Dina	8 Team A	Game Theory
Schwartz	Lior	8 Team A	Game Theory
Kahn	Jesse	8 Team B	Rubic's Cube
Rice	Joseph	8 Team B	Rubic's Cube
<b>Schreiber HS</b>			
Christake	Phoebe	10	Analyzing the Kip Movement
Hay	Zachary	10	Environmental Impact of Electronic Cars in different regions
Kessler	Ryan	10	Analyzing the Rates of Depression
Loewy	Noah	10	Fuel-Efficient Vehicles
Parekh	Rajen	10	Developing MLB Spending Strategies
Ruskin	Daniel	10	Analyzing the Factors of Tommy John Surgery
Schor	Dylan	10	Movie Industry Trends
Senders	Nathaniel	10	Analyzing the Spread of Hemophilia
Fried	Harrison	11	Applied Statistics
Helman	Benjamin	11	Physics
Hirschwerk	Sally	11	Applied Statistics
Levin	Jamie	11	Logistic Regression
O'Neill	Ashley	11	Data Analysis
Ren	Jeannie	11	Inside the Black Box: Topological Memorization and Generalization
Shroff	Maansi	11	Educational Debt
<b>South Woods MS</b>			
Aaronson	Avery	7 Team A	Math in Music
Lebolt	Molly	7 Team A	Math in Music
Aaronson	Chase	7 Team B	Pi
Lebolt	Jesse	7 Team B	Pi
Hamid	Alliyah	7 Team C	Golden Ration
Nayak	Anika	7 Team C	Golden Ration
Dadi	Shivane	8	General Relativity
Dapice	Kyle	8	Math in Computer Science
Fan	Darius	8	Graphics in Video Games
<b>Syosset HS</b>			
Chang	Wonjoon	10	The Monty Hall Problem
Chu	Michael	10	Business
Gangat	Nadeem	10	Mathematical Finance
Kopacz	Michael	10	Geometry
Li	Kevin	10	The Coin Change Program
Rasquinha	Giselle	10	Modeling the Spread of Disease
Yun	Joshua	10	Ternary Optical Computing
Elenowitz	Joshua	11	Corporate Valuatron
Gangat	Azim	11	Mathematical Finance

Inteti	Sathvik	11	Computer Science
Jang	Sophia	11	Vectors
Luo	Yan	11	Economics and Game Theory
Mastandrea	Nicholas	11	BCS Theory
Mittal	Arushi	11	Mathematical Modeling
Zhao	Lingfei	11	Nonparametric Function Approximation
<b>Thompson MS</b>			
Guo	Jordan	7	Big-O Notation
Hon	Griffin	7	A Random Walk
Hon	Lawrence	7	Data and Statistics
Li	Katherine	7	Pascal's Triangle
Mehta	Ria	7	Graph Theory
Mittal	Anish	7	Game Theory
Tooley	Arya	7	Fibonacci Sequence
Wang	Ethan	7	Pascal's Triangle
Yu	Michael	7	Binary System
Rishi	Anoushka	8	Binary Systems
Zhang	Amanda	8	Probability with Combinations and Permutations
Zhuo	Ella	8	Traetenberg Speed System
<b>West Hollow MS</b>			
Lerebours	Laura	7 Team E	Cryptology
Rimpel	Justin	7 Team E	Cryptology
Leshnowar	Jacob	8	How Mathematics Solved Music's Temperament Problem
Wang	Alice	8	A New Set of Axioms for Euclidean Geometry
<b>Wheatley School</b>			
Gulati	Shrey	9	Magic Squares
Pahuja	Armaan	9	Chaos Theory and its effects on Meterological Predictions
Prajapati	Krittika	9	Binary Numbers
Wong	Justin	9	THE INFLUENCE OF REPLACING PRIME NUMBERS IN PUBLIC KEY
Bansal	Manav	10	Mathematical Models Utilizing Differential Equations to Model
Chabria	Anya	10	The Applications of Mathematics in Literature
Hassan	Sarah	10	Applying Linear Animation Using Mathematics Programing and Art
Jayam	Viraj	10	Examining Functions Under Quasi-Stereographic Projections
Arbitljacoby	Alex	11	Calculating Atomic Radius
Belle	Alyssa	11	Preventing Motion Sickness in Virtual Reality
Ramos	Madison	11	Mathematical Modeling Neural Networks
Wong	Trenton	11	It's all about that Base: Three-Halves
Zacheriah	Aaron	11	Transfinite Numbers
Zhong	Sharon	11	Wind Resistance and Failure Analysis
<b>Woodland MS</b>			
Pienkowski	Jakub	7	Blaise Pascal's Triangle
<b>Woodmere MS</b>			
Rasheed	Ibrahim	8	Fibonacci Sequence History and How it is Used in Real Life
Azemoun	Leeya	8 Team A	Math Behind Waves
Chavre	Hiral	8 Team A	Math Behind Waves