

Al Kalfus Long Island Math Fair
March 1, 2019
Preliminary Round
Hofstra University

Long Island Math Fair Committee

Joyce Bernstein, Alan Blayne, Christine Brown, Jerry Chen, Ian Dunst, Lynda Hennig, Lucille Hunter,
Richard Hunter, Nat Janoff, Marlene Kalfus, M.C. Kim, Maxine Lifshitz, Christine Pette, Joseph
Quartararo, Paulette Quartararo, Sylvia Silberger, Terry Springer, Charles Windwer

In Memory of our Founder Alfred Kalfus

Long Island Math Fair Sponsors

Hofstra University and the Suffolk County Mathematics Teachers Association, the Nassau County
Mathematics Teachers Association, and the Nassau County Association of Mathematics Supervisors

Program

Hofstra University

Multipurpose Room- grades 7, 8, 9 and Teams

Little Theatre- Grade 10, 11

Students Check Room Assignments: 3 pm

Judging Preliminary Round: 3:15 pm

Building Key

A	Adams	25	BR	Breslin	23	C	Calkins	14
D	Davison	8	GAL	Galwing	5	HE	Heger	4
L	Lowe	9	MA	Mason	5	ME	Memorial	1
N	Netherlands	33	R	Roosevelt	19	S	Starr	60
SC	Student Cntr	31	W	Weed	26	CHP	Berliner	61
HD	H Dome	48						

Special Thanks

We would like to give special thanks to Sylvia Silberger for all the on-site planning at Hofstra University for
this year's Fair.

<u>Judge's Name</u>		<u>School</u>
Ahmed	Rakib	Elmont Memorial High School
Alt	Matthew	HAFTR
Arengo	Sebastian	Long Beach Middle School
Ariste	Amelie	Elmont Memorial High School
Augenblick	Rebecca	Kennedy High School
Barbarett	Rick	Lawrence High School
Barrera	Christina	Manhasset High School
Beach	Bryan	Schreiber High School
Beleckas	John	The Wheatley School
Benos	Melinda	Hicksville School District
Berry	Greg	Jericho High School
Bird	Elliott	ICPS
Brooks	Kimberly	Woodland Middle School
Bruno	Josephine	Herricks Middle School
Buonpastore	Meghan	Manhasset High School
Burt	Alexander	Friends Academy
Caldarera	Laura	Hicksville School District
Callahan	Chris	Roslyn High School
Cannatta	Matt	Herricks Middle School
Caracciolo	Kasey	The Wheatley School
Carlson	Michael	East Moriches School
Carman	Mark	Roslyn High School
Cetron	Jason	Hicksville School District
Chiarenza	Jill	Friends Academy
Cioffi	Danielle	Copiague High School
Cirisane	Anthony	Herricks High School
Connors	Jackie	Hicksville School District
Considine	Christine	North Shore High School
Cooper	Dave	Herricks Middle School
Cote	Maria	Herricks Middle School
Curran	Eileen	Holy Trinity High School
D'Agostino	Joe	Freeport High School
DeMarinis	Matt	Jericho High School
DiLillo	Emily	Stimson Middle School
D'Onofrio	Amanda	Candlewood Middle School
Edelman	Marc	Roslyn High School
Fanning	Jim	Holy Trinity High School
Ferrara	Emily	Kennedy High School
Ferraro	Mariangela	North Shore Hebrew Academy HS
Fonseca	Loretta	Roslyn Middle School
Fox	Patti	Half Hollow Hills HS West
Frayler	Kristin	North Shore Middle School

<u>Judge's Name</u>		<u>School</u>
Fricke	Danielle	West Hollow Middle School
Gallagher	Tina	Schreiber High School
Garcia	Joanne	Jericho High School
Gazzola	Debbie	Thompson Middle School
Genova	John	Syosset High School
Gentile	Danielle	Woodland Middle School
Gerver	Rob	ICPS
Gizza	Gabriella	Roslyn Middle School
Gorman	Bryan	Schreiber High School
Greene	Nora	North Shore Hebrew Academy HS
Hart	Stacy	Herricks Middle School
Hauser	Elizabeth	Syosset High School
Hayes	Peter	ICPS
Holland	Wendy	Hicksville School District
Hubbard	Matt	Herricks Middle School
Hune	Elizabeth	Jericho High School
Huntley	Renee	Roslyn Middle School
Jorge	Kevin	Lawrence High School
Kalish	Art	ICPS
Keenan	Dave	North Shore Middle School
Khan	Alyssa	Herricks Middle School
Khan	Nasir	Freeport High School
Kitov	Julia	Herricks Middle School
Koenig	Rich	Manhasset High School
Labrocca	Ron	Hicksville School District
LaGattuta	Genevieve	Kennedy High School
Lamberti	Krista	ICPS
LaRose	Matt	Manhasset High School
LaSpina	Leon	Herricks Middle School
Lawrence	Melissa	MacArthur High School
Leary	Jaclyn	Kennedy High School
Lee	Soowook	Roslyn High School
Lesser	Jeffrey	HAFTR
Liguori	Matt	Huntington High School
Litvak	Alison	Herricks High School
Loughran	Rosaleen	Roslyn High School
Lynam	Carina	Thompson Middle School
Mann	Lavleen	Garden City High School
Mantell	Abraham	Hofstra University
Marcellino	Allyson	South Woods Middle School

<u>Judge's Name</u>		<u>School</u>
Marin	Elisa	South Woods Middle School
Marks	Casey	Schreiber High School
Massa	Bernadette	Hicksville School District
Mauro	Joe	Herricks Middle School
Maus	John	North Shore High School
Maus	Stacey	Thompson Middle School
Mazzarino	Christine	Lawrence High School
McComsey	Jessica	Lawrence High School
McDonagh	Christine	East Northport Middle School
McNamara	Paul	Thompson Middle School
Medina	Jackie	Manhasset High School
Melaniff	Natalie	Roslyn Middle School
Mendez	Lisette	Lawrence High School
Meyers	Kevin	The Wheatley School
Middleton	Ryan	Northport High School
Modiano	Jeffrey	Garden City High School
Montera	Timothy	Copiague High School
Morrow	Josh	Hicksville School District
Moss	William	Lawrence High School
Mugno	TJ	Lawrence High School
Murthy	Geetha	Herricks High School
Ninan	Melissa	Syosset High School
O'Donnell	Mary Lou	Kennedy High School
O'Hara	MaryRose	Holy Trinity High School
Orlep	Mike	Herricks Middle School
O'Rourke	Erin	Syosset High School
Ottinger	Julia	Schreiber High School
Owens	Christine	Syosset High School
Pace	Morg Alexis	The Wheatley School
Palmeri	Jim	ICPS
Papatheodorou	Anastasia	Elmont Memorial High School
Paradisi	Denise	Lawrence High School
Parisi	Grace	Long Beach Middle School
Paulson	Donald	The Wheatley School
Pellett	MaryClare	Holy Trinity High School
Perlow	Heather	Garden City High School
Pesce	Virginia	Lawrence High School
Petras	Laura	Manhasset High School
Pisciotta	Deanna	Woodmere Middle School
Polan	Sondra	East Meadow High School

<u>Judge's Name</u>		<u>School</u>
Presti	Jen	Hicksville School District
Quengua	Lindsey	Herricks High School
Ring	Paul	Clarke High School
Ruthkowski	Brian	Northport High School
Ryan	Darwin	Copiague High School
Santoro	Peter	Garden City High School
Saraceni	Sal	Lawrence High School
Scalise	Joseph	Stimson Middle School
Scheider	Amy	East Meadow High School
Scheuerman	Greg	South Woods Middle School
Schorn	Alan	Great Neck North High School
Scott	Erik	Roslyn Middle School
Siegel	Jon	Hicksville School District
Silverstein	Lauren	Thompson Middle School
Simon	Sami	Roslyn High School
Smith	Carolyn	Roslyn Middle School
Sotiriadis	John	Wantagh High School
Soto	Marisol	Lawrence High School
Spriggs	Marguerite	Clarke High School
Steffens	Josh	Roslyn Middle School
Straub	Ryan	Elmont Memorial High School
Stroh	Leanne	Jericho High School
Sturchio	Alison	West Hollow Middle School
Survilla	Nicole	Jericho High School
Talibon	Janelle	South Woods Middle School
Tannazzo	Vinent	Finley Middle School
Teseo	Robert	The Wheatley School
Valentino	Mark	Roslyn Middle School
Vartelatos	Speros	Freeport High School
Vollaro	Alex	Oceanside High School
Wallad	Carrie-Ann	Herricks High School
Walsh	Joe	MacArthur High School
Wankel	Charles	North Shore High School
Warren	Lindsay	Thompson Middle School
Weilbacher	Chris	Kennedy High School
Whehmann	Katherine	Jericho High School
Winter	Patrick	Northport High School
Wolfert	Adam	Schreiber High School
Young	Diana	Garden City High School

<u>Last Name</u>	<u>First Name</u>	<u>Grade</u>	<u>Team</u>	<u>Topic</u>	<u>Room</u>
Bethpage HS					
Channapatna	Ruchitha	9		Trinomial and Multinomial Theorems	BR28
Channapatna	Suchitha	9		Diophantine Equations	BR29
Candlewood MS					
Chandra	Viti	8	Team A	The Mathematics of Relativity in Astronomy	HE100
Eisenberg	Ellis	8	Team A	The Mathematics of Relativity in Astronomy	HE100
Clarke HS					
Panickssery	Nikhil	9		Multidimensional Tic-Tac-Toe	BR100
Ahmed	Sanjana	11		Zero	A109
Panickssery	Arjun	11		The Mathematics of Voting	A200
Sayed	Ankit	11		Scoring Methods in Cricket	D11
Copiague HS					
Dobrowolsko-Rosvor	Jakub	9		Pentominoes	BR103
Falco	Joseph	9		Game Theory's Real Life Applications	BR105
Hankerson II	Johnell	9		Gerrymandering	BR111
Ismael	Zaiba	9		Probability I Genetic Disorders	BR112
Mendoza-Rodriguez	Myra	9		Proving Heron's Formula	BR200
Parikh	Sahil	9		Cryptography in Everyday Life	BR202
Rhoden	Devonie	9		Mathematics of Forecasting Hurricanes	BR203
Shah	Deep	9		Baseball and Statistics	BR206
Szvejko	Kuba	9		The Paradoxes of Time Travel	BR208
Antosiak	Adam	10		The Enigma	GAL13
East Meadow HS					
Chinnadurai	Nishanth	10		Mathematics of the Rubik's Cube	GAL14
Caceres	Joaquin	11		Fluid Dynamics	D14
Fong	Alyssa	11		Statistical Analysis in Pancreatic Cancer Research	D16
Froehlich	Vanessa	11		Calculus	D17
Pandy	Ikshu	11		Determinants	D101
Pienkowski	Mateusz	11		The Mathematics of Snowflakes	D102
East Moriches MS					
Mosher	Chloe	7	Team A	Optical Illusions	SC141
Titus	Jazmin	7	Team A	Optical Illusions	SC141
Sitzmann	Megan	8	Team A	Mathematical Paradoxes	SC218
Tully	Emily	8	Team A	Mathematical Paradoxes	SC218
Elmont Memorial HS					
Ahmed	Raheel	8		Eulers Number	HE101
Griffith	Ajayda	8		Math Through Rainbows	R13
Sookway	Kevin	8		Mathematical Logic	R15
Blanfort	Marthe	9		Binomial Theorem	BR209
Nnabuogor	Nneka	9		Geometry in Nature	BR211
Percival	Saniya	9		Logarithms	BR216
Agesin	Akinwale	10		Mysteries of Zero	GAL16
Alexander	Christopher	10		Polar Coordinantes	GAL17

Last Name	First Name	Grade	Team	Topic	Room
Hooke	Keilia	10		Conic Sections	GAL18
Peck	Michael	10		Binary Numbers	HD201
Emeagwali	Nneka	11		Newton's Method	D104
Marcello	Christiano	11		Math & Quantum Theory	MA20
Toussaint	Ogden	11		Math in Metereology	MA22
Finley MS					
Galvin	Lars	7		The Fibonacci Sequence	BR13
Ganley	Andrew	7		Golden Ratio	BR15
Polinsky	Olivia	7		Probability in Genetics	BR16
Edgar-McNerney	Benjamin	7	Team A	Pascal's Triangle	SC142
Stollmack	Jackson	7	Team A	Pascal's Triangle	SC142
Giron	David	7	Team B	The Fibonacci Sequence	SC143
Gordon	Charlotte	7	Team B	The Fibonacci Sequence	SC143
Soric	Eli	7	Team B	The Fibonacci Sequence	SC143
Friends Academy					
Chen	Charlotte	9		Mathemtics and Music	BR217
Chen	Nate	9		The Wonder of Magic Squares	C306
Labelson	Ethan	9		Nural Nets	C332
Mendoza	Angel	9		The Physics of Sports	BR28
Barry	Ella	10		Rowing: The Mathematics of the Force Curve	HD203
Lee	Lindsay	10		Magic Squares	HD204
Zelman	Carleigh	10		The Seven Bridges of Koenigsberg	HD207
Garden City HS					
Crowley	Elizabeth	9		How does Understanding the Dimensions of a Tennis	BR29
Grlic	Mary	9		Fractals in Music	BR100
Iudica	Emily	9		The Golden Ratio in Art and Architecture	BR103
Kephart	Caterina	9		The Life of an Egyptian in Numbers	BR105
Li	Jason	9		The Monty Hall Problem and its Application in Real Life	BR111
Liberopoulos	Gwen	9		What is the Math Behind Soccer	BR112
Martinus	Farren	9		Probability Theory	BR200
Perrini	Erica	9		Mathematics in Cheerleading	BR202
Schmitt	Luke	9		The Math Behind Lacrosse	BR203
Wu	Aidan	9		The Patterns in Pascal's Triangle	BR206
Zheng	Jenny	9		Hilbert's Hotel Paradox	BR209
Abruzzo	Mia	10		The Math Behind Winning the lottery	CHP117
Bailey	Ian	10		Mathematics in Juggling	L201
Berkery	Katherine	10		Mathematics Behind Card Tricks	L203
Calouri	Christina	10		The Meathematics Behind the Efficiency of Hospitals	L211
Fiore	Matthew	10		Musical Math: Geometry in Musical Patterns	S103
Gannon	Nancy	10		Mathematics and Monopoly	S107
Hopkins	Alexandra	10		Mathematics and Oreos	S108
McDonald	Lauren	10		The Study of Mazes	S204A
Padala	Ryan	10		The Likelihood of Physical Perfection and an In-Depth	S308
Pappas	Sydney	10		How Math Influences Photography	GAL13
Pfaff	Fiona	10		The meathematics Behind Forensic Science and How it	GAL14

<u>Last Name</u>	<u>First Name</u>	<u>Grade</u>	<u>Team</u>	<u>Topic</u>	<u>Room</u>
Remick	Anthony	10		How can Cellular Automata be used to Model Real	GAL16
Riceman	Andrew	10		Sudoku Puzzles and their Solutions	GAL17
Ryan	Grace	10		The Mathematics Behind Volleyball	GAL18
Treanor	Robert	10		The Mathematics Behind Reaching the Speed of Light	HD201
Byrne	Christian	11		Tower of Hanoi	ME10A
Fornasar	Julia	11		Fibonacci Sequence	ME10B
Ingrassia	Julianna	11		The Math Behind a Magic Cube	N13
Kane	Marybeth	11		Gauss' View of Curvature and Theorema Egregium	N15
Karr	Kaitrin	11		Polynomial Functions and Leading Coefficients in	N16
Kephart	William	11		Assessment and Description of Game Theory and its	N18
Liberopoulos	Jessica	11		What is the Math Behind Running	N20
McDonald	Dylan	11		An Analysis of the Riemann Hypothesis	N21
O'Donohue	Liam	11		The Games of Set	W100A
Ottomanelli	Isabella	11		The Four Color Theorem	W100B
Overback	Holden	11		The Echolocation of Dolphins	W204
Paskewitz	Gavin	11		Is There a Perfect Basketball Shot?	A109
Tierney	Kyle	11		Abacus	A200
Wu	Sarah	11		Thinking Outside the Box: Music with Sinusoidal	D11
Young	Jillian	11		How does Wind Affect the Speed of a Sailboat	D14
Zheng	James	11		The Boy or Girl Paradox	D16
Great Neck North HS					
Gruber	Danielle	10		A Comparison of Models for Evidence Accumulation	HD203
HAFTR					
Balbus	Julius	10		The Idiosyncratic Properties of Primes	HD204
Kurlander	Gabriel	10		The Theory of Infinite Sets	HD207
Oved	Leor	10		Prime Patterns	CHP117
Nathan	Matthew	11		The Enigmatic Nature of Prime Numbers	D17
Half Hollow Hills HS East					
Lerebours	Sophia	9		Picks Theorem	BR28
Half Hollow Hills HS West					
Su	Nina	9		Birthday Paradox	C332
Chaudhary	Yashita	10		Graph Theory	S103
Gupta	Yashita	10		Math in Great Circles	GAL17
Pomerantz	Sarah	10		The Math in Trains	L201
Sacchetti	Sophia	11		Probability and Gambling	D101
Herricks HS					
Balasubramanian	Aadithyaa	9		Genetics and Statistics	BR208
Kang	Genesis	9		Asymmetric and Symmetric Cryptography	BR216
Khondkar	Wafiq	9		Integral Calculus	BR211
Patnam	Pranati	9		Matrices and Computer Graphics	BR217
Soni	Keneil	9		Game Theory Within the European Union	C306
Zovko	Christopher	9		Conditional Probability and Bayes' Theorem	C332
Koe	Justin	10		Machine Learning for Statistical Analysis	L203

Last Name	First Name	Grade	Team	Topic	Room
Lakshmanan	Haritha	10		Quaternions	L211
Rasheed	Arfan	10		Octonions	S103
Vinod	Arpitha	10		Machine Learning and Mathematical Optimization	S107
Chen	Derek	11		Calculus of Variations	D102
Hsu	Carrie	11		Fourier Series	D104
Leung	Jonathan	11		Applying L'Hopital's Rule to Real Life	MA20
Martin	Jared	11		Computer Graphics	MA22
Shao	Ying (Sherry)	11		Probability in Genetics	ME10A
Herricks MS					
Agarwal	Prisha	7		Infinity	BR18
Apostolatos	Melina	7		Cryptology	BR18
Chan	Preston	7		Game Theory	BR25
Huang	Connie	7		Modular Numbers	BR13
Jain	Vidur	7		Parabolas	BR20
Karunakar	Vishnitha	7		Prime Numbers	BR15
Lee	Devon	7		Chaos Theory	BR16
Lee	Dylan	7		The Game of Nim	BR20
Lo	Ryan	7		Conic Sections	BR26
Patel	Heemali	7		Pi	BR25
Patel	Khushi	7		Pascal's Triangle	BR26
Thopchemeni	Varun	7		Conic Sections	BR13
Abraham	Jacob	8		Suspension Bridges	R102
Chan	Jarod	8		Vectors	R111
Chheda	Zachary	8		Math and Basketball	R102
Gondal	Ammar	8		Topology	R111
Goyal	Deven	8		Chess and Math	R13
Jacob	Kevin	8		Permutations and Combinations	R201
Jalwan	Ashish	8		Graph Theory	R110
Jha	Ankita	8		The Golden Ratio	R213
Lam	Ashley	8		Pascal's Triangle	HE101
Lee	Jeylin	8		Math in Volleyball	R112
Lui	Lauren	8		Ancient Number Systems	R112
Mendez	Alexa	8		Math in Medicine	R206
Nabi	Sanyah	8		The Golden Ratio	R108
Patel	Raj	8		Optical Illusions	R110
Patel	Shrey	8		Math and Video Games	R108
Ramcharitar	Peter	8		Diophantine Equations	R15
Rams	Hannah	8		Tessellations	R201
Saini	Rushil	8		Laws of Sine & Cosine	R206
Shah	Ashay	8		Fibonacci Numbers	R213
Tan	Liam	8		Matrices and Determinants	HE101
Yang	Mitchell	8		Magic Squares	R13

Last Name	First Name	Grade	Team	Topic	Room
Hicksville SD					
Bachhal	Birinder	7		Fibonacci Sequence	BR15
Sonika	Avisha	7		Pi	BR16
Multani	Amrita	7	Team A	Trigonometry	SC142
Noor	Raha	7	Team A	Trigonometry	SC142
Gupta	Pearl	7	Team B	Pascals Triangle	SC141
Walia	Jia	7	Team B	Pascals Triangle	SC141
Agarwal	Siddh	7	Team C	Cryptology	SC143
Raval	Parikej	7	Team C	Cryptology	SC143
Mahmood	Bilal	7	Team D	Statistics	SC141
Nanugonda	Saivamsi	7	Team D	Statistics	SC141
Iyer	Divya	7	Team E	Knot Theory	SC142
Nasari	Zahel	7	Team E	Knot Theory	SC142
Ashraf	Sara	8		The golden ratio	R15
Malayil	Pratiksha	8		Predicting House Prices using linear regression	R102
Varghese	Michael	8		Trigonometry	R108
Bhasin	Aarti	8	Team A	Pythagorean Theorem	HE100
Bhasin	Rakhee	8	Team A	Pythagorean Theorem	HE100
Jain	Aryan	9		Mathematical Cosmology	BR28
Jin	Xiang	9		Network Theory	BR29
Singh	Ekam	9		Binomial Theorem	BR100
Anugu	Adith	10		Game Theory	S108
Chittabathini	Aniruddh	10		Investing	S204A
Singh	Navpreet	10		Phuck's Constant	S308
Sonika	Aniket	10		Codes and Ciphers	GAL13
Carrillo Rubio	Luis	11		Fourth Dimensional Geometry	N13
Chan	Christopher	11		Sundial Mathematics	ME10B
Gupta	Sejal	11		Neural Network	N15
Immanuel	Jack	11		Game Theory	N16
Jain	Viveka	11		Banach - Tarski Paradox	N18
Mathew	Noel	11		Cuphers and Cryptography	N20
Mehta	Somya	11		Math behind Sudoku	N21
Munn	Laura	11		Polar Coordinate System	W100A
Naqvi	Alina	11		Set Theory	W100B
Nasari	Alaha	11		Game Theory	W204
Shamim	Fawziyah	11		The Analysis and Application of the Probablility Theory	A109
Sivasankaran	Dhanush	11		Banach - Tarski Paradox	A200
Holy Trinity HS					
DeGeorges	Mia	9		Math in Astronomy	BR103
O'Brien	Kassandra	9		Pascal's Triangle	BR105
Shebar	Arianna	9		Chinese Remainder Theorem	BR111
Irwin	Jalen	10		Platonic Solids	GAL14
Mathew	Thomas	10		Fibonacci Sequence	GAL16
Pietzak	Caleb	10		Baseball Statistics	GAL17
Rocanova	Isabella	10		A Look Back Using Bayesian Statistics	GAL18

<u>Last Name</u>	<u>First Name</u>	<u>Grade</u>	<u>Team</u>	<u>Topic</u>	<u>Room</u>
Pietzak	Caleb	10	Baseball Statistics		GAL17
Roccanova	Isabella	10		A Look Back Using Bayesian Statistics	GAL18
Saini	Yash	10		Bell Numbers	HD201
Spano	Nicholas	10		Fractals	HD203
Suryavanshi	Anshul	10		Trachtenberg Speed System	HD204
Uemura	Nicolas	10		Matrices	HD207
Schocken	Sela	11		The Proof of $1+1=2$	D11
Sullivan	Emily	11		Tessellations	D14
ICPS					
Arengo	Maya	10		Infinity	CHP117
Arengo	Uma	10		Fractal Analysis	L201
Guo	Justin	10		Partitioning Circles with Chords	L203
Joseph	Victoria	10		Imaginary Numbers	L211
Kampta	Seth	10		Math in Music: Fuzzy Matching	S107
Manevitz	Matthew	10		Spherical Geometry	S108
Narayan	Rithika	10		Area of Irregular Curved Shapes	S103
Serban	Michelle	10		Factoring & Fibonacci	S204A
Seto	Gwendolyn	10		Square Roots	S308
Valagolam	Davesh	10		Trisecting an Angle	GAL13
Zhao	Kevin	10		Square Roots	GAL14
Lampert	Lance	11		Exploring Parabola & Ellipse-like Loci with Mutated	D16
Oladipo	Julia	11		Fibonacci Sequence, Pythagorean Triples	D17
Yang	Madeline	11		Prove Monte Carlo	D102
Jericho HS					
Chaudhary	Pratim	10		RSA Encryption Mathematics	GAL16
Hu	William	10		Fuss-Catalan Numbers	GAL17
Lee	Irene	10		Axial Forces in Simple Planar Roof Trusses vs. Fractal-	GAL18
Li	Danny	10		Modular Arithmetic	HD201
Li	Joanne	10		Analysis & Modification of an Outbreak Prediction	HD203
Mu	Edgar	10		Graph Theory	HD204
Murrgeverl	Aadhithan	10		The Physics Behind Pool	HD207
Ochalek	Peter	10		Using Logarithmic Regression to Create Swimming	CHP117
Ren	Richard	10		Predicting Air Pollution in Beijing Using Regression	L201
Shah	Vyom	10		Self Driving Cars	L203
Shen	Justin	10		Math in Tennis	L211
Wang	Jie Rui (Grace)	10		Prisoner's Dilemma	S103
You	Daniel	10		Modeling a Rubik's Cube with Graph Theory	S107
Zhou	Judy	10		Optimal Velocity & Distance from Earth to GEOs	S108
Chen	Austin	11		Game Theory	D101
Dharia	Sohil	11		Using Collatz Conjecture for Fibonacci Numbers	D104
Josinsky	Sarah	11		Bayes Theorem of Probability	MA20
Patel	Shreya	11		Fibonacci Sequence in Nature	MA22
Pietraski	Miranda	11		Computer Modeling of Planetary Motion	ME10A
Rothman	Jeremy	11		Physics of a Basketball Shot	ME10B

<u>Last Name</u>	<u>First Name</u>	<u>Grade</u>	<u>Team</u>	<u>Topic</u>	<u>Room</u>
Sinnan	Keertti	11		Predicting Bite Force in Mammals	N13
Turgut	Alp	11		Mathematical Models of Light & Energy	N15
Jericho MS					
Pahlavan	Natalia	8		Solving for Area of Irregular Shapes	R110
Kennedy HS					
Altstaedter	Alyssa	10		Josephus Problem	S204A
Benson	Siean	11		Fourier Series	N16
Casale	Anthony	11		Applications	N18
Cheung	Kyle	11		Markov Theory	N20
Diaz	Juliana	11		Hall's Marriage Theorem	N21
Dong	Kristen	11		Fractal Geometry	W100A
Futterman	Amanda	11		Koch Snowflake	W100B
Gera	Atul	11		Menger's Sponge	W204
Gutterson	Alexa	11		Fermats Last Theorem & Modularity Theorem	A109
Kachianos	Julia	11		Curry's Paradox	A200
Kapla	Shaun	11		Clothoid Loops	D11
Kim	Minjee	11		Freemish Crate	D14
Kim	Ryan	11		The Pappus Chain	D16
Korn	Elizabeth	11		Modular Arithmetic	D17
Kothari	Mansi	11		Fractal Geometry	D101
Levy	Jaime	11		Monty Hall Problem	D102
Liu	Emily	11		Sphere Eversion	D104
Norris	Ryan	11		Rocket Fuel	MA20
Persaud	Isabella	11		Oxygen Content Equation	MA22
Smith	Russell	11		Peasant Multiplication Application	ME10A
Song	Jaehyeon	11		Ford Fulkerson Algorithm	ME10B
Stern	Amy	11		Modular Arithmetic	N13
Taub	Allison	11		Fermats Last Theorem	N15
Totala	Kreena	11		Generate Polygonal Numbers	N16
Varghese	Eshwin	11		Non-Euclidean Geometry	N18
Vathappallil	Pravin	11		Viviani's Curve	N20
Venturini	Nicholas	11		Exploring Eclipses	N21
Zutler	Andrew	11		Josephus Problem	W100A
Lawrence HS					
Collado	Alisson	9		Math and Music	BR112
Dagrin	Ileana	9		Napolean's Theorem	BR200
De La O	Stefany	9		The Shape of Space	BR202
Domanas	Gabrielle	9		Music Theory	BR203
Hercules	Dayana	9		Math in Baseball	BR208
Khordorkovskiy	Melanie	9		Forensics	BR206
Lizama Palma	Stephany	9		Projectiles in Video Games	BR209
Martinez-Carranza	Alisson	9		Architecture	BR211
Mazariegos	Katherine	9		Free Fall Motion	BR216
Michlig	Audrey	9		Math in Music	C306

Last Name	First Name	Grade	Team	Topic	Room
Morales	Emily	9		Accelerated Motion	BR217
Nijjer	Manmohit	9		Gaming Math	C332
Ramirez-Rivera	Kressias	9		The Four Color Theorem	BR28
Ramos	Joseline	9		Forensics and Mathematics	BR29
Scott	Xian	9		Math, Music Theory, and Science	BR103
Urgen	Ilia	9		Indirect Measurements & Similar Triangles	BR100
Viera	Gabriel	9		Statistics and Soccer	BR105
Andrade	Daniela	10		Math and Medicine	S308
Bran	Natalie	10		Euclid's Elements	GAL13
Davis	Kitana	10		The Birthday Paradox	GAL14
Gonzalez	Meivelin	10		Math and Music	GAL16
Sidlow	Jordana	10		Logarithms	GAL17
Sidlow	Serena	10		Physics Equations	GAL18
Flores	Maria	11		Mathematics of Roller Coasters	W100B
Giordonello	Michael	11		Pi	W204
Rampersaud	Devon	11		Fibonacci Sequence	A109
Salnave	Sabine	11		Brachistochone Curves	A200
Sandhu	Bhawan	11		Math in Space	D11
Long Beach MS					
Arengo	Rio	8		The Math Behind Bitcoin	R111
MacArthur HS					
Castrillon	Ryan	9		Math in Sports	BR111
Zhang	Zexaan	11		Reimann Hypothesis	D14
Manhasset HS					
Cozzi	Alex	9		Physics of Scuba Diving	BR112
Giannakopoulos	Despina	9		The Golden Ratio	BR200
Hahn	Andrew	9		Moneyball: The Sabermetrics	BR202
LoCurto	Ashley	9		Bayes' Theorem with the Probability of Cancer	BR203
LoCurto	Jillian	9		Juggling Mathematics	BR206
Magas	Ante	9		The Perfect Free Throw	BR209
Newman	Ashley	9		Magic Squares	BR208
Rubin	Noah	9		The Math and Physics Behind Hitting a Baseball	BR211
Vorillas	Peter	9		The Perfect Free Throw	BR216
Harragan	Emily	10		The Importance of Prime Numbers	HD203
Hyland	Conor	10		Probability of the Lottery	HD201
Pidherny	Kyria	10		The Mathematics Behind a Rainbow	HD204
DiRaimo	Guilia	11		Poiseuille's Law and its Medical Implications	D16
Kelly	Emma	11		The Fibonacci Sequence	D101
Kiley	Matthew	11		The Mathematics Behind the Expanding Universe	D17
Newman	Carly	11		Matricies	D102
Orthos	Kayla	11		Geometry in Math	D104
Park	Dohyeon (Michelle)	11		Nine-Point Circle	MA20
Ryan	Charlotte	11		Mathematics of Tic-Tac-Toe	MA22
Schwenk	Nicole	11		Infinity	ME10A

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North Shore Hebrew Acad HS					
Horn	Shoshana	9		Zeno's Paradox	BR217
Hakakian	Alia	11		Mass Point Geometry	ME10B
Prawer	Ruben	11		Derivatives and Economics	N13
Shedlo	Hannah	11		Knot Theory	N15
North Shore HS					
Bochove	Travis	9		Polar coordinates and equations	C306
Lamond	Olivia	9		An investigation of 5-con triangles and other $(2n - 1)$ -	C332
Blumenthal	Sophie	10		Line reflections and associated rational functions	HD207
Brown	Robert	10		Investigating polygons generated in the interior of	CHP117
Castle	Lucas	10		Creating quadrilaterals from various procedures	L201
Pappous	Noelle	10		Coordinate geometry and matrices	L203
Weber	Kelly	10		An equation for dilations	L211
Hunt	Katherine	11		Tetrations	N16
Lavenda	Louis	11		The game of Dr. Nim and investigations with game	N18
Reilly	Esme	11		Trigonometric parallax	N20
North Shore MS					
Lee	Noah	7		Game Theory	BR18
Levin	Harrison	7		Rubik's Cube	BR20
Tao	Claire	7		Fractals	BR25
Frangopoulos	Angelica	8	Team A	Conic Sections	SC218
Nochowitz	Matthew	8	Team A	Conic Sections	SC218
Northport HS					
Connor	James	10		Computer Generated Cities	CHP117
Kavrakis	Valia	10		Probability	GAL18
McDonagh	Thomas	10		Advanced Matrix Algebra	L211
Patel	Harsh	11		Math in Tennis	A200
Northport MS					
Bingham	Charlotte	8		Synthetic Division	R15
Oceanside HS					
Hoffman	Daniel	9		Analytics of MLB Players	BR29
Visconti	Sarah	11		The Voting Theory	N21
Roslyn HS					
Boreland-Sheshori	Camila	9		Sudoku	BR100
Burns	Jared	9		Code Division Multiple Access	BR103
Christenson	Luke	9		Statistical Analysis	BR111
Gross	Madison	9		Ailles Rectangle and Speical Triangles	BR112
Guillon	Luca	9		Shoelace Method	BR105
Hoffman	Jacob	9		Hurricane Math	BR200
Huang	Kevin	9		Math behind Games	BR202
Kessler	Ethan	9		Combinatorics	BR203
Kim	Yeji	9		Recursive	BR206
Kuturoff	Benjamin	9		Probability of Hitting the Bullseye in Darts	BR208
Kwon	Madison	9		Perspective	BR209
Levine	Bennett	9		Inscribed Shapes	BR211

Last Name	First Name	Grade	Team	Topic	Room
Lin	Jasmine	9		Algorithms behind Social Media	BR216
Lind	Liam	9		Statistics in the Classroom	BR217
Litvack	Ian	9		Combinatorics	C306
Lukose	Alicia	9		Statistics in Basketball	C332
Mazarin	Ashley	9		Math Behind Animations	BR28
McNair	Laura	9		Physics of Badminton	BR29
Milholland	Aidan	9		Math in Art	BR100
Nercessian	Olivia	9		Newtons Method	BR103
Opran	Claudia	9		Math within Dancing	BR105
Rice	Michael	9		30 Vector Planes Utilized in Physics	BR111
Sehgal	Harshita	9		Playing Card Combinatorics	BR112
Shah	Mahi	9		Inscribed Figures	BR200
Stam	Rylie	9		Probability	BR202
Sung	Emily	9		Music in Math	BR206
Tofarosh	Ammar	9		Math Behind Cryptocurrency	BR203
Valauri	Sophia	9		Musical Tuning Systems	BR208
Mayourian	Jacob	10		Probability and Strategies in Darts	S103
Weisman	Sydney	10		Hypotrachoids	S107
Roslyn MS					
Goodman	Cole	7		Sabermetrics	BR26
Gross	Jacob	7		Matrices	BR13
Law	Kyle	7		Types of Math in Computer Programming	BR15
Lee	Jacob	7		Math of Origami	BR16
Lee	ZeJane	7		Trigonometry	BR18
Shen	Cayden	7		Math Behind a Tennis Serve	BR20
Winston	Michael	7		Fractals	BR26
Yeh	Stephanie	7		Math in Animations	BR25
Youn	Hanah	7		Math in Music	BR13
Zwerling	Jacob	7		Bayes Theorem	BR15
Bogatryyova	Masha	8		Fractals	R112
Chandra	Sonia	8		Diagonals in Convex Polygons	R201
Dong	Jessie	8		Math in Architecture	R206
Fasanello	Robert	8		Exterior Angle Theorem	R213
Fliegler	Matthew	8		How Pilots use Trigonometry to Fly planes	HE101
Garmise	Eliza	8		Math & Rollercoasters	R13
Gerber	Harry	8		Geometry	R15
Lam	Kristi	8		Math in Finance	R102
Lee	Christian	8		The Binomial Theorem	R108
Lee	Lydia	8		Trigonometry	R110
Leiderman	Avery	8		Golden Ratio	R111
Liswood	Amanda	8		The Mathematics of the Flu	R112
Mashkevich	Lemuel	8		Special Triangles	R201
Nguyen	Emelie	8		Pentagram	R206
Ren	Catherine	8		Base Numbers	R213
Schwartz	Mac	8		Limits and Derivatives	HE101

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Sen	Shirmoyee	8		Visualizing Math through Geospatial Technology	R13
Shih	Wayne	8		Pyramids	R15
Sinha	Arya	8		Magic Hexagons	R102
Weisman	Sophie	8		Objects Viewed in the Front Window of a Car	R108
Yung	Maxx	8		Triangles and Trig	R111
Berger	Jaiden	8	Team A	Game Theory	HE100
Nabavian	Dina	8	Team A	Game Theory	HE100
Schwartz	Lior	8	Team A	Game Theory	HE100
Kahn	Jesse	8	Team B	Rubic's Cube	SC218
Rice	Joseph	8	Team B	Rubic's Cube	SC218
Schreiber HS					
Christake	Phoebe	10		Analyzing the Kip Movement	S108
Gold	David	10		Designing Helmet Prototypes to Lessen Concusion	S204A
Hay	Zachary	10		Environmental Impact of Electronic Cars in different	S308
Kessler	Ryan	10		Analyzing the Rates of Depression	GAL13
Loewy	Noah	10		Fuel-Efficient Vehicles	GAL14
Parekh	Rajen	10		Developing MLB Spending Strategies	GAL16
Ruskin	Daniel	10		Analyzing the Factors of Tommy John Surgery	GAL17
Schor	Dylan	10		Movie Industry Trends	GAL18
Senders	Nathaniel	10		Analyzing the Spread of Hemophilia	HD201
Sung	Jeffrey	10		Microtransactions	HD203
Fried	Harrison	11		Applied Statistics	W100A
Goldberg	Hannah	11		Statistical Analysis	W100B
Guo	Tiffany	11		Identifying prognostic gene signature for Diffuse large	W204
Helman	Benjamin	11		Physics	A109
Hill	Kayla	11		Human Effects on Wildlife extinction rates	A200
Hirschwerk	Sally	11		Applied Statistics	D11
Levin	Jamie	11		Logistic Regression	D14
Muratore	Julia	11		Analyzing in Agricultural Production	D16
O'Neill	Ashley	11		Data Analysis	D17
Ren	Jeannie	11		Inside the Black Box: Topological Memorization and	D101
Shroff	Maansi	11		Educational Debt	D102
South Woods MS					
Chen	Alex	7		Linear Equations	BR16
Aaronson	Avery	7	Team A	Math in Music	SC143
Lebolt	Molly	7	Team A	Math in Music	SC143
Aaronson	Chase	7	Team B	Pi	SC141
Lebolt	Jesse	7	Team B	Pi	SC141
Hamid	Alliyah	7	Team C	Golden Ration	SC142
Nayak	Anika	7	Team C	Golden Ration	SC142
Huang	Isabelle	7	Team D	Math in Careers	SC143
Ling	Rachel	7	Team D	Math in Careers	SC143
Dadi	Shivane	8		General Relativity	R110
Dapice	Kyle	8		Math in Computer Science	R112
Fan	Darius	8		Graphics in Video Games	R201

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Kopacz	Maya	8		Tower of Hanoi	R206
Raghu	Ketan	8		Fourth Dimension	R213
Singh	Priyansh	8		Sine, Cosine, Tangent	HE101
Lin	Rachel	8	Team A	Tower of Hanoi	HE100
Qian	Tiffany	8	Team A	Tower of Hanoi	HE100
Mepani	Aarian	8	Team B	Euler's Number	SC218
Mutyala	Ashok	8	Team B	Euler's Number	SC218
Stimson MS					
	Vozza	8		Math in Music	R13
Syosset HS					
	Chang	10		The Monty Hall Problem	HD204
	Chu	10		Business	HD207
	Gangat	10		Mathematical Finance	CHP117
	Kopacz	10		Geometry	L201
	Li	10		The Coin Change Program	L203
	Rasquinha	10		Modeling the Spread of Disease	L211
	Van Dorn	10		Fractals	S103
	Yun	10		Ternary Optical Computing	S107
	Elenowitz	11		Corporate Valuatron	D104
	Gangat	11		Mathematical Finance	MA20
	Inteti	11		Computer Science	MA22
	Jang	11		Vectors	ME10A
	Luo	11		Economics and Game Theory	ME10B
	Mastandrea	11		BCS Theory	N13
	Mittal	11		Mathematical Modeling	N16
	Zhao	11		Nonparametric Function Approximation	N15
Thompson MS					
	Ahn	7		Mobis Strip	BR18
	Chen	7		History of Numbers	BR20
	Guo	7		Big-O Notation	BR25
	Hon	7		A Random Walk	BR26
	Hon	7		Data and Statistics	BR13
	Jabir	7		Fractals	BR15
	Li	7		Pascal's Triangle	BR16
	Mehta	7		Graph Theory	BR18
	Mittal	7		Game Theory	BR20
	Shah	7		Magic Squares	BR25
	Sriganesh	7		Mathematics in Soccer	BR26
	Su	7		Pascal's Triangle	BR13
	Tooley	7		Fibonacci Sequence	BR16
	Wang	7		Pascal's Triangle	BR15
	Wang	7		The Abacus	BR18
	Yin	7		The Seven Bridges of Konigsberg	BR20
	Yu	7		Binary System	BR25

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Pawa	Samaira	8		Mendal's law	R15
Rishi	Anoushka	8		Binary Systems	R102
Zhang	Amanda	8		Probability with Combinations and Permutations	R108
Zhuo	Ella	8		Traetenberg Speed System	R110
Wantagh HS					
Volz	Melanie	10		Fibonacci Numbers and DNA	S108
West Hollow MS					
Aravind	Rishi	7	Team B	Cryptography	SC141
Mody	Jash	7	Team B	Cryptography	SC141
Sanwo	Daniel	7	Team B	Cryptography	SC141
Lerebours	Laura	7	Team E	Cryptology	SC142
Rimpel	Justin	7	Team E	Cryptology	SC142
Khan	Shaheer	8		Golden Ratio & Phi	R112
Leshnower	Jacob	8		How Mathematics Solved Music's Temperament	R111
Shapiro	Mark	8		Cauchy's Residue Theorem	R201
Wang	Alice	8		A New Set of Axioms for Euclidean Geometry	R206
Wheatley School					
Gulati	Shrey	9		Magic Squares	BR209
Lindenauer	Jack	9		Fibonacci Numbers	BR211
Pahuja	Armaan	9		Chaos Theory and its effects on Meterological	BR216
Prajapati	Krittika	9		Binary Numbers	BR217
Wong	Justin	9		THE INFLUENCE OF REPLACING PRIME NUMBERS IN	C306
Bansal	Manav	10		Mathematical Models Utilizing Differential Equations	S204A
Chabria	Anya	10		The Applications of Mathematics in Literature	S308
Hassan	Sarah	10		Applying Linear Animation Using Mathematics	GAL13
Jayam	Viraj	10		Examining Functions Under Quasi-Stereographic	GAL14
Ness	Eric	10		Logic and Arguments	GAL16
Arbitljacoby	Alex	11		Calculating Atomic Radius	N18
Belle	Alyssa	11		Preventing Motion Sickness in Virtual Reality	N20
Ramos	Madison	11		Mathematical Modeling Neural Networks	N21
Shah	Diya	11		Which Comparison Factor Influences Greater Gender	W100A
Wong	Trenton	11		It's all about that Base: Three-Halves	W100B
Zacheriah	Aaron	11		Transfinite Numbers	W204
Zhong	Sharon	11		Wind Resistance and Failure Analysis	A109
Woodland MS					
Pandey	Kshan	7		Zeno's Paradox	BR26
Pienkowski	Jakub	7		Blaise Pascal's Triangle	BR18
Goraya	Simran	8		The Mathematics Behind Music	R213
Woodmere MS					
Flores	Leila	8		Jakow Trachtenburg's Speed System of Mathematics	HE101
Rasheed	Ibrahim	8		Fibonacci Sequence History and How it is Used in Real	R13
Azemoun	Leeya	8	Team A	Math Behind Waves	HE100
Chavre	Hiral	8	Team A	Math Behind Waves	HE100