

AI Kalfus Long Island Math Fair 2016

Grade 7

BRONZE

Candlewood Middle School	Ojas	Mehta		Math in the Stock Market
Candlewood Middle School	Sarah	Pomerantz		Math in Judaism
Candlewood Middle School	Viren	Varma		Math in Baseball
East Moriches School	Michael	Giacchetto		Sports Statistics
East Northport Middle School	Matthew	Boyle		Math and Music
East Northport Middle School	Thomas	McDonagh		Matrix
Herricks Middle School	Justin	Koe		Pascal's Triangle
Herricks Middle School	Samuel	Leung		The Law of Cosines
Herricks Middle School	Kyle	Pinzon		Matrices and Determinants
Herricks Middle School	Chiara	Tan		Matrices
Herricks Middle School	Emily	Wei		Parabolas
North Shore Middle School	Matt	Drivas		Pascals Triangle
North Shore Middle School	Lauren	Hagen		Codes and Ciphers
North Shore Middle School	Scott	Lenney		Fractals
North Shore Middle School	Lucia	Martin		Codes and Ciphers
Northport Middle School	Justin	Cavanaugh		Pressure
Northport Middle School	Griffin	Crafa		Imaginary and Complex Numbers
West Hollow Middle School	Kevin	Hoxha		Special Relativity
West Hollow Middle School	Sohan	Shetty		Nim Games
South Woods Middle School	Kiersten	Louie	Team A	Geometry by Folding Paper
South Woods Middle School	Amanda	Qian	Team A	Geometry by Folding Paper

SILVER

East Northport Middle School	Derek	Stratton		Air and Water Pressure
Hicksville Schools	Navptreet	Singh		p
Long Beach Middle School	Maya	Arengo		The Golden Ratio
North Shore Middle School	Sophie	Blumenthal		Magic Squares
North Shore Middle School	Christina	Efstathiadis		Zeno's Paradox
North Shore Middle School	Aiden	Mandell		Codes and Ciphers
North Shore Middle School	Patrick	Reynolds		Fractals
North Shore Middle School	Sam	Rosencrans		Illusions
North Shore Middle School	Kelly	Weber		Zeno's Paradox
Northport Middle School	Camden	Burk		Mesozoic Math- Math and Dinosaurs
Northport Middle School	Keito	Jusdon-Teranishi		Graph Theory
Northport Middle School	Frank	Rasizzi		The Golden Ratio
Northport Middle School	McKenzie	Schuvart		Imaginary Numbers
Roslyn Middle School	Jacob	Mayourian		Math in Barcodes
Roslyn Middle School	Lindsey	Russ		Prisoner's Dilemma
Thompson Middle School	Josh	Langman		Magic Squares
Woodmere Middle School	Kelvin	Cheng		The Pythagorean Theorem
East Moriches School	Jade	Hawkesworth	Team B	Seven Bridges of Konigsberg
East Moriches School	Jane	Paulson	Team B	Seven Bridges of Konigsberg

GOLD

Commack Middle School	Ryan	Passaro	"You Gotta Know When to Fold'em in Holdem"
Commack Middle School	Jordan	Walsh	"Passing Go": Mathematics of Monopoly
Herricks Middle School	Alison	Chou	Game Theory
Herricks Middle School	Andrew	Kim	Logarithms
Herricks Middle School	Preethi	Krishnamoorthy	Matrices and Determinants
Herricks Middle School	Haritha	Lakshmanan	Fibonacci Numbers
North Shore Middle School	Dean	Caldwell	Magic Squares
North Shore Middle School	Sophie	Rosencrans	Codes and Ciphers
Northport Middle School	James	Connor	Transformations and Geometry in Video Games
Northport Middle School	Elias	Guiliano	Math in Music: Equal Temperament and Pythagorean
Roslyn Middle School	Ethan	Wachsmann	Mathematics of projectile motion
South Woods Middle School	Giselle	Rasquinha	Mendel's Law
Syosset High School	Kevin	Li	$a^2 + b^2 = c^2$ So Much More Than c^2
West Hollow Middle School	Seth	Kampta	Math in Music

Grade 8

BRONZE

Commack Middle School	Max	Pirtle	Takeya's Needle Problem
East Moriches School	Hanna	Tufano	Fractals
East Northport Middle School	Luke	Cacic	Deriving the Trigonometric Pythagorean Identities
East Northport Middle School	Harsh	Patel	Probability
Hauppauge Middle School	Ritvik	Chilakamarthy	Egyptian Fractions
Hauppauge Middle School	Matthew	Maroney	Linear Regression
Herricks Middle School	Derek	Chen	Topology
Herricks Middle School	Carrie	Hsu	Cubic Functions
Herricks Middle School	Shreya	Patel	Conic Sections
Herricks Middle School	Harsh	Soni	Limits
North Shore Middle School	Katherine	Hunt	Math in Aviation
North Shore Middle School	Carolyn	Thoet	Complex Numbers
Northport Middle School	Sophia	Borovikova	Conic Sections
Northport Middle School	Marcos	Guerrero	Binary and Hexadecimal Numbers
Stimson Middle School	Emma	Graff	Japanese Abacus
Stimson Middle School	Stephen	Hong	Fibonacci Numbers
Stimson Middle School	Alyssa	Ramsaran	Baseball by the Numbers
The Wheatley School	Rahul	Ajmena	Projectile Motion
The Wheatley School	Sahil	Jain	Fractals
The Wheatley School	Rachel	Lee	A Brain of a Swimmer
The Wheatley School	Madison	Ramos	Mathematics in Computer Graphics
The Wheatley School	Trenton	Wong	Alternate Number Bases
The Wheatley School	Emily	Yagoda	Arbitrage
West Hollow Middle School	Megan	Gole	Euler's Polyhedral Formula
West Hollow Middle School	Nicholas	Likos	Matrices
West Hollow Middle School	Cassandra	Ye	The Mathematics of Swimming
Woodland Middle School	Alyssa	Fong	Math in Music: Through the Decades
West Hollow Middle School	Sarah	Abrams	Team A Tesselations
West Hollow Middle School	Taylor	Cook	Team A Tesselations
Woodland Middle School	Ashish	Johnson	Team A Math and Architecture

Woodland Middle School	Lucas	Mun	Team A	Math and Architecture
West Hollow Middle School	Rachel	Bigman	Team B	Magic Squares
West Hollow Middle School	Brianna	Tedesco	Team B	Magic Squares
South Woods Middle School	Jishaan	Alam	Team C	Golden Ratio
South Woods Middle School	Patrick	Chen	Team C	Golden Ratio
South Woods Middle School	Archisha	Datta	Team F	Infinity
South Woods Middle School	Yvette	Sol	Team F	Infinity
Oceanside Middle School	Catherine	Henn	Team I	The Tower of Hanoi
Oceanside Middle School	Christina	Palmieri	Team I	The Tower of Hanoi
Oceanside Middle School	Jenna	Piccinano	Team J	The Pythagorean Theorem and Musical Applications
Oceanside Middle School	Jessie	Rosano	Team J	The Pythagorean Theorem and Musical Applications

SILVER

Commack Middle School	Alexandra	Ramotar		The Phi Torus Array
Commack Middle School	Paige	Robinson		The Mathematics of Fraud Examination
Copiague Middle School	Nicole	Hernandez		Infinity in Math
East Northport Middle School	Theodore	Krantz		Math in Music
East Northport Middle School	Kirsten	Widmaier		Egyptian Math
Elmont Memorial HS	Kyla	Browne		Imaginary and Complex Numbers
Frost Middle School	Matthew	Rosati		Magic Squares
Hauppauge Middle School	Caroline	Fortmeyer		The Mathematics of Barcodes
Herricks Middle School	Angela	Joseph		Pascal's Triangle
Herricks Middle School	Joanna	Thyagaray		The Law of Cosines
North Shore Middle School	Harrison	Gillman		Conic Sections
Northport Middle School	Kyle	Mitard		Logarithms
Northport Middle School	Kevin	Penrose		Cryptography
Northport Middle School	Chloe	Stepanek		Pi
Roslyn Middle School	Andrew	Antenberg		Randomization
Roslyn Middle School	Lianna	Friedman		Conic Sections
Roslyn Middle School	Ashley	Hou		Perimeter of Triangles and Curved Edges
Roslyn Middle School	Maddie	Rubin		Binary Number System
Roslyn Middle School	Nicholas	Terbancea		Ratios of Circumcenters and centriods
Roslyn Middle School	Olivia	Zhang		Golden Ratio
South Woods Middle School	Julia	Klimberg		Fibonacci Sequence
Syosset High School	Sophia	Jang		Mathematics of Networks
The Wheatley School	Natalia	Potrapeluk		The Math in Soccer
The Wheatley School	Rebecca	Sparacio		The Fibonacci Sequence
West Hollow Middle School	Melissa	Chen		Lissajous Curves
Woodland Middle School	Ikshu	Pandey		Pascal's Triangle
Woodmere Middle School	David	Vilensky		Math 8 Economics
Lawrence Middle School	Nathan	Mundell	Team A	The ZipF Mystery
Lawrence Middle School	Noah	Scropo	Team A	The ZipF Mystery
Roslyn Middle School	Liana	Drenis	Team A	Barcoding / QR codes
Roslyn Middle School	Justin	Fried	Team A	Barcoding / QR codes
Lawrence Middle School	Cristina	Herrera	Team B	Chaos Theory
Lawrence Middle School	Bhawan	Sandhu	Team B	Chaos Theory
Lawrence Middle School	Lia	Cohen	Team C	Cancer and Genetics
Lawrence Middle School	Maria	Flores	Team C	Cancer and Genetics
West Hollow Middle School	Brooke	Gronich	Team C	Optical Illusions
West Hollow Middle School	Sloane	Levine	Team C	Optical Illusions

GOLD

Commack Middle School	Andrew	Wang		Mathematics of Sound Waves
Herricks Middle School	Rohan	Gupta		Differential Calculus
Herricks Middle School	Emily	Tucker		Matrices and Determinants
Herricks Middle School	Rachel	Won		Tetrahedron
North Shore Middle School	Kyra	McCreery		Euler's Number
North Shore Middle School	Henry	Purcell		Fractals
North Shore Middle School	Esme	Reilly		Topology
Roslyn Middle School	Adam	Covey		Platonic Solid
Roslyn Middle School	Carly	Khazzam		Fractals
Roslyn Middle School	Jack	Litvack		Four color theorem
Roslyn Middle School	Feyi	Rufai		Golden Ratio
Roslyn Middle School	jacob	Stein		Hyperbolic)Paraboliid
Roslyn Middle School	Jake	Stoller		Conic Sections
South Woods Middle School	Yan	Luo		Pi
The Wheatley School	Karen	Li		Mathematics in Modem and Olden Cryptology
Thompson Middle School	Ronit	Dhulia		Exploring the patterns within Pascal's Triangle and their
Woodland Middle School	Vanessa	Froehlich		Solids of Revolution
East Moriches School	Jasmine	Agme	Team A	Chaos Theory
East Moriches School	Jacob	Croce	Team A	Chaos Theory
East Moriches School	Thomas	Lidonnici	Team A	Chaos Theory
Roslyn Middle School	Daniella	Futoran	Team B	Logarithms
Roslyn Middle School	Zach	Perlman	Team B	Logarithms
South Woods Middle School	Victoria	Guo	Team E	Astronomy and Mathematics
South Woods Middle School	Merin	Thomas	Team E	Astronomy and Mathematics

Grade 9

BRONZE

Doshi STEM- Nassau Boces	Nelson	Chow		Math Involved in Swimming
Doshi STEM- Nassau Boces	Michal	Lewkowicz		Gravity
Garden City High School	Christian	McGannon		Sabermetrics
Great Neck North HS	Christopher	Lu		The truth behind Galileo's infinite sets
Half Hollow Hills HS East	Isabella	Bordwin		Math in Music
Half Hollow Hills HS East	Matthew	Weltmann		Catalan Numbers
Herricks High School	Andrew	Rocco		Trajectory of Projectiles
Holy Trinity High School	John	Barry		Pascal's Triangle
Lawrence High School	Syed	Bukhari		Limits
MacArthur High School	Nicholas	Portello		The History of Controversies of the Pythagorean Theorem
Manhasset High School	Michael	Farrell		The Postage Stamp Problem
Northport High School	William	Doyle		Derivatives of Differential Calculus
Northport High School	Daniel	Krohn		Polar Coordinates
Northport High School	Mario	Lanzilotta		Law of Sines and Cosines
Northport High School	Marisa	Macolino		Logarithms and Exponents
Northport High School	John	Zieran		Derivatives
Oceanside High School	Alex	Utrecht		Four Color Theorem
Roslyn High School	Alexa	Khazzam		Graph theory
Roslyn Middle School	Truman	Chong		Factors of Integers
Roslyn Middle School	Andrew	Goldberg		Ailles Rectangle and thye Golden Triangle

Roslyn Middle School	Brynn	Goodstadt	Area: Shoelace Method
Roslyn Middle School	Matthew	Koo	Number Theory
Syosset High School	Thomas	Lam	Fourier Transformation
Syosset High School	Aileen	Park	Proofs in Number Theory
The Wheatley School	Vedant	Singh	The Nine Ball Problem
Woodmere Middle School	Mithuna	Kumar	Components for a Mars Mission

SILVER

Doshi STEM- Nassau Boces	Jack	Cecere	The Math Behind a Rubiks Cube
East Meadow High School	Laura	Lopez	The Mathematics in Clocks
Elmont Memorial HS	Brianna	Munn	Series and Sequences
Half Hollow Hills HS East	Ashley	Blatt	Polynomial Functions
Half Hollow Hills HS East	Sophia	Clark	Optical Illusions
Half Hollow Hills HS East	Leo	Wild	Taxicab Geometry
Half Hollow Hills HS East	Jessica	Winakor	Probability in Genetics
Herricks High School	Christina	Kim	Pythagoras
Herricks High School	Soham	Rawal	Inferential Statistics in Medicine
Holy Trinity High School	Patrick	Harten	Math and NASCAR
Jericho High School	David	Xu	Ant Colony Optimization
Kennedy High School POB	Audrey	Shine	Zipf's Law
Lawrence High School	Heysil	Baez	Projectiles
Northport High School	Samuel	Driesen	Limits
Roslyn High School	Hannah	Ginsberg	Inscribed circles of different shapes
Roslyn High School	Justin	Schiavo	Velocity needed to get a rocket from the launchpad to orbit
Roslyn Middle School	Joshua	Flashner	Packing tangents circles into a exterior tangent circle
Roslyn Middle School	Daniel	Flyer	Packing circles into regular polygons
Roslyn Middle School	Sarah	Kim	Triangular numbers
Roslyn Middle School	Harris	Miller	Packing sequences - number theory
Roslyn Middle School	Catherine	Tom	Number theory- paths in a mxn grid
Roslyn Middle School	Spencer	Tsao	Triangular arrays
The Wheatley School	Manan	Shukla	The Ramsey Theorem

GOLD

Bethpage High School	Soham	Maiti	Time Dilation and Length Contradiction
Cold Spring Harbor HS	Stephen	Davis	Sums of Sequences
Commack High School	Delina	Levine	The Mathematics of AM Radio
Commack High School	Pragati	Muthukumar	The Mathematics of GPS
East Meadow High School	Anusha	Arora	Algebraic Topology
Great Neck North HS	Joshua	Rothbaum	Data on the diamond: sabermetric analysis in baseball
Half Hollow Hills HS East	Shreya	Krishman	Math behind search engines
Herricks High School	Joanna	Lau	Fractals and Cancer
Herricks High School	Hita	Soni	Conic Sections in Outer Space
Herricks High School	Andrew	Tsai	Divine Proportion/Golden Ratio
Holy Trinity High School	Bing lun	Jiang	Math and Music
Jericho High School	Airanna	Pahlavan	Matrices and Applications
MacArthur High School	Saajid	Chowdhury	Collatz Conjecture
North Shore Hebrew Academy	Eden	Schneck	Angle of Incidence and Its Effect on Seasons
North Shore High School	Hanah	Leventhal	Rectangle-Square Paradox

North Shore High School	Christina	Ramirez	Area Irregular Figures
Northport High School	Rachel	Ewanyk	Mathematical Magic
Roslyn High School	Emily	Leventhal	Math Behind the perfect song
Roslyn High School	Emily	Mintz	Graph theory: A mathematical approach to modeling real world
Roslyn High School	Gemma	Schneider	Deriving formulas to determine the number of squares, triangles, and
Roslyn Middle School	Jeremy	Kim	Number theory
Schreiber High School	Lucas	Romanski	The Fundamentals at Special Relativity

Grade 10

BRONZE

Clarke High School	Justin	Ramlall	The Fourth Dimension
Clarke High School	Pantho	Sayed	Mathematics in Astronomy
Clarke High School	Aashini	Shah	Coloring in Mathematics
Commack High School	Michael	Delmonaco	Infinite Sums and Riemann Hypothesis
Commack High School	Mia	Serritella	Analyzing Minerals through internal Geometry and Calculated Stress
East Meadow High School	Mehrin	Ali	Taylor Series
Friends Academy	Ashley	Brown	Fibonacci sequence, number spiral, and the golden ratio
Friends Academy	Paige	Silverstein	Chaos Theory
Half Hollow Hills HS East	Alexi	Braun	Optical Illusions
Half Hollow Hills HS East	Lauren	Fogel	Matrices
Half Hollow Hills HS East	Benjamin	Goldberg	Matrices
Half Hollow Hills HS East	Danielle	Luntz	Fibonacci
Herricks High School	Anisha	Singla	The Golden Ratio and the Fibonacci Sequence
Hicksville Schools	Priyansh	Raval	Mass Point Geometry
Holy Trinity High School	Andrea	Campos	The Four Color Theorem
Holy Trinity High School	Ambar	DiGiorgio	Math and Astronomy
Holy Trinity High School	Louis	Farino	The Golden Ratio
Holy Trinity High School	Amy	Jacob	Mathematics of Spirals
Holy Trinity High School	Carol	Nguyen	Mathematics in Monopoly
Holy Trinity High School	Ashwinder	Parmar	Mathematics of Juggling
Jericho High School	Rohan	Basavaraju	Gamma Function
Jericho High School	Emma	Gan	Molecular Geometry
Jericho High School	Harsha	Venkatesh	Simpson's Paradox
Jericho High School	Alex	Xu	Conway's Game of Life
Manhasset High School	Emily	Kiley	Iteration and Chaotic Dynamics
Manhasset High School	Adam	Pidedjian	Punting Probabilities
North Shore Hebrew Academy	Benjamin	Gilman	Gyroscopes
Northport High School	Sam	Gozelski	Momentum and Collisions
Northport High School	Daniel	Kim	Cryptography
Northport High School	Aimee	Morris	The Math of Rainbows
Oceanside High School	Jack	Dauber	Game Theory and World War
Oceanside High School	Nickolas	Dimitrakas	Global Warming Effects
Oceanside High School	Nina	Pagona	Palindromic Cycles
Oceanside High School	Jacqueline	Wright	Logistic Growth in Ebola Outbreak
Schreiber High School	Alexandra	Gao	Analyzing factors that effect the Tkatchev
Smithtown High School West	Steven	Spreizer	Algorithms

Syosset High School	Jacquelin	Tang	Fractal Geometry
<u>SILVER</u>			
Clarke High School	Pavit	Suri	Heron's Formula
Doshi STEM- Nassau Boces	Nabil	Chowdhury	Exploratoion of the Frog Puzzle and Variances
Doshi STEM- Nassau Boces	Manpreet	Kaur	The Mathematics Behind Ice Skating
Doshi STEM- Nassau Boces	Sonali	Malhotra	The Mathematics in Structural Design
Elmont Memorial HS	Dominique	Browne	Hypercomplex Numbers
Friends Academy	Jennie	Miller	Knot Theory and its Applications
Great Neck North HS	Luhan	Chen	Taylor Series Expansion
Half Hollow Hills HS East	Aditi	Patil	Differential Equations
Half Hollow Hills HS West	Lauren	Tucker	Calculating the numerical values for letters, word, and phrases
Holy Trinity High School	Julia	DiGrazia	Mathematics and Bubbles
Jericho High School	Melanie	Cen	Chaos Thoery
Jericho High School	Caroline	Chen	Medication Adherence and Preventable Expenses: Case Study of
Manhasset High School	Marissa	Locurto	Examining Applied Rational Functions
North Shore High School	Jacob	Berlin	Arbelos Properties
North Shore High School	Frederic	Bischoff	Polar Coordinates
North Shore High School	Isabelle	Glennon	Five-Con Triangles
North Shore High School	Kinsale	Reilly	Circular Inversions
North Shore High School	Michael	Ruisi	Escribed Circles to Triangles
Northport High School	Nicholas	Holfester	Derivatives and Velocity
Northport High School	Ian	MacDougall	Codes and Ciphers
Northport High School	Stephen	Muzyka	Game Theory
Northport High School	Joseph	Petrucci	Geometric Problems of Antiquity
Portledge School	Jerry	Sun	Kepler's Second Law: Proof by Calculus
Roslyn High School	Stephanie	Tom	Kobon Triangle Problem
Schreiber High School	Shiraz	Johnson	Forces on Roller Coaster Cars
Schreiber High School	Julia	Ruskin	Measuring the Impact of Vaccination Rates on Measles Transmission
Schreiber High School	Sherry	Shi	Calculating and analyzing the CO2 emission as a result of OPEC's oil
Syosset High School	Daniel	Israel	Quantum Key Distribution: Key Creation Encoded
Syosset High School	Wanlin	Li	Addition of Rational Points on Elliptic Curves
The Wheatley School	Justin	Vega	Non-Euclidean Geometry and its Applications

<u>GOLD</u>			
Herricks High School	Janet	Hsu	Computer Graphics
Herricks High School	Aman	Sawhney	LaPlace Transform Application
Herricks High School	Angela	Wu	Spherical Geometry
Holy Trinity High School	Hannah	Muller	Fractals
ICPS	Justin	James	Prime Triplets and Twin Primes
Jericho High School	Benjamin	Wong	Using Binary Star Systems to Determine Stellar Masses
Jericho High School	Kristal	Wong	ISBN Codes and Credit Card Numbers
North Shore High School	Hally	Bello	Perfect Triangles
North Shore High School	Meagan	Kearney	Consecutive Addends
North Shore High School	Riley	Keenan	Dividing a Line Segment
North Shore High School	Bryce	Roth	Hypotenuse Restrictions
North Shore High School	Lauren	Santucci	Circle Partitioning
North Shore High School	Robert	Sharkey	Conics and Pythagorean Triples

Schreiber High School	Iris	Cai	Variations of the Pascal's Triangle
Schreiber High School	Nicole	Calamari	Expanding the Justification Criteria for Solar Panel ROI
Schreiber High School	Anna	Finkelstein	Studies on a Variation of the Koch Snowflake/Curve
Schreiber High School	Ayato	Kobayashi	Analysis of the sneaker secondary (resale) market, creating resale
Schreiber High School	Solbi	Oh	3D Koch Snowflake vs. Original Koch Snowflake
Syosset High School	Hannah	Abraham	Golden Ratios and its Application in Aesthetics
Syosset High School	Jahnavi	Arora	Color Theorem
Syosset High School	Jillian	Goldberg	Shortest Networks & Steiner Points
Syosset High School	Neil	Johari	Machine Learning

Grade 11

BRONZE

East Meadow High School	Nikita	Uppal	Computational Algorithms
Garden City High School	Seunghyun	Woo	Elliot Wave Theory
Half Hollow Hills HS East	Jesse	Blatt	Related Rates
Half Hollow Hills HS West	Anjali	Maheshwari	Integration
Herricks High School	Nibras	Ahmed	Chaos Theory
Herricks High School	Nora	Koe	Data Science
Hicksville Schools	Shana	Mathew	The Monty Hall Problem
Jericho High School	Shimona	Agarwal	Optimization
Jericho High School	Sandra	Li	Statistical Trends in Swimming Records
Jericho High School	Brittney	Munayirji	Development of Logarithms
Jericho High School	Brett	Ritter	Counting Cards and Expected Returns
Jericho High School	Aarthi	Sridhar	Volume of Spheres
Kennedy High School POB	Alec	Ash	Force Field Function for Molecules with Modified Bases
Kennedy High School POB	Julia	Cohen	Barth Sextic
Manhasset High School	Benjamin	Kim	Modeling
North Shore High School	Sarah	Leventhal	Tangent Circles in Triangles
North Shore High School	Kyra	Rieger	Heron's Formula
Northport High School	Shannon	Citrin	Calculus in Ice Cream
Northport High School	James	Donohue	Mathematics in Track and Field
Northport High School	Cybele	Laisney	Investigation of Soccer Free-Kicks
Northport High School	Shawn	Weigand	Math in Track and Field
Oceanside High School	Michael	Pocress	Modeling Disease Progression with Differential Equations
Oceanside High School	Thomas	Wollweber	Analysis of Deer Population in America
Schreiber High School	Elias	Feldman	Identity Theft Demographics
Schreiber High School	Sarah	Goldman	A Mathematical approach in comparing nutrition facts label contents
Schreiber High School	Jordan	Hurt	Predicting El Nino Using Lunar Cycles
Schreiber High School	Brittany	Taylor	Statistic Comparison of Schreiber High School Standardized Tests
The Wheatley School	Jax	Nussbaum	Finite Differences

SILVER

East Meadow High School	Jordan	Diamond	Related Rates
East Meadow High School	Erin	Floody	Mathematics of Bouncing Balls
East Meadow High School	Kirkland	Sugrim	Mathematics of Origami
Elmont Memorial HS	Joshua	Phillip	Math and the Stock Market
HAFTR	Rachel	Sacks	The Enigmatic Qualities of Prime Numbers

Half Hollow Hills HS East	Matthew	Taj	Integrals
Half Hollow Hills HS East	Nicholas	Tramosch	Integrals
Half Hollow Hills HS West	Tatum	Ogata	Game Theory
Hicksville Schools	Jasdeep	Braich	Traveling Salesman Problem
Hicksville Schools	Johnson	Jiang	Reimannian Geometry
Hicksville Schools	Sailesh	Srinivas	The Chinese Remainder Theorem
Huntington High School	Miranda	Nykolyn	The Mathematics Behind Navigational Systems
ICPS	Alex	Clopper	Squares, Cubes, Triangle Numbers
ICPS	Thomas	Postiglione	Consecutive Fibonacci Number in Quadratics
Kennedy High School POB	Philip	Danziger	Boolean Algebra and Logic
Kennedy High School POB	Jason	Getzler	Lagrange's Theorem
Kennedy High School POB	Max	Kuster	Spherical Spirals
Kennedy High School POB	Mili	Shah	Inverse Square Law
Kennedy High School POB	Georgia	Xenakis	Simple Continued Fractions
Kennedy High School POB	Jina	Yom	Markov Chains
MacArthur High School	Casey	Butcher	Economic Viability of Sewer Systems
North Shore High School	Caroline	Lucas	Irrational Constructions
North Shore High School	Rajan	Vohra	Inscribed Circles in Triangles
North Shore High School	Matthew	Zapken	DeMoivre's Theorem
Schreiber High School	Samantha	D'Alonzo	Testing the Effectiveness of the Friendship Paradox for Tracking the
Syosset High School	Richard	Tang	Coast Lines: A Fractal Conundrum
Syosset High School	David	Wang	Data Anonymization
The Wheatley School	Gil	Lotzky	Tetris: The infinite Case

GOLD

Half Hollow Hills HS East	Viren	Sabhnani	Linear Algebra and its Applications
Half Hollow Hills HS East	Adam	Stein	Area under the curve
Herricks High School	Naeha	Pathak	Cryptography
Huntington High School	Steve	Yeh	Alternative Methodology of Numerical Integration
ICPS	Dan	Celic	Proving Higher Dimension Figures Using Trig
Jericho High School	Justin	Ames	Cyclic Primes
Jericho High School	Nate	Lee	Cracking the German Enigma
Jericho High School	Adam	Pahlavan	Anovel Method for Wedding Virtual Electrodes
Kennedy High School POB	Rachel	Aber	Gnomonic Projection
Kennedy High School POB	Talia	Blum	Continued Fractions and Diophantine Equations and Pell's Equation
Manhasset High School	Michael	Bakshandeh	The Physics Behind a Golf Swing
Manhasset High School	Parker	Van Roy	Sustainable Energy Production by Black Holes
North Shore High School	Charlotte	DeMartini	Brahmagupta Quadrilaterals
Roslyn High School	Mark	Kong	Conic sections and Time
Schreiber High School	Maria	Kogan	Analyzing the Effects of Iteration on Image Registrations Using the
Schreiber High School	Robert	Konoff	Optimizing Solar Panels With Net Metering and Adjusting Angles
Schreiber High School	Dylan	Langone	On the Orbital Trajectories of Comparatively Low Mass Satellites
Schreiber High School	HyeonSeok	Nam	Application of Pascal's Triangle on 3-Dimensional Network Models
Smithtown High School West	Stephen	Kyranakis	Power Series
Syosset High School	Maximillian	Chen	Bayesian Approach to Consumer Credit Screening
Syosset High School	Andrea	He	Mass Points
Syosset High School	Yash	Samantaray	Roots of Unity

The Wheatley School

Jakob

Gilbert

Equations for combining exponents

Grade 12

BRONZE

HAFTR	Isaac	Adlerstein	Infinity and Beyond
HAFTR	David	Fleschner	A Hierarchy of Infinite Sets
HAFTR	Jeremy	Herskowitz	Triangular Numbers
HAFTR	Jacob	Hoffman	The Cardinality of Numbers
HAFTR	Jack	Winkler	Chaos Theory
Hicksville Schools	William	Swiss	Category Theory and Functional Programming
Manhasset High School	Matthew	Alonso	Basic Financial Mathematics
Manhasset High School	Grace	Catlett	Spread of Infectious Disease
Manhasset High School	Ahmad	Chaudhry	Polling Pitfalls
Manhasset High School	Thomas	Gold	Vector Applications and Manipulations
Manhasset High School	Timothy	Petras	Probability and Patterns
Manhasset High School	Alexandra	Steck	The Math of Magic Squares
North Shore High School	Ayanna	Fossett	Geometric Trisection
North Shore High School	Katerina	Ganasoulis	Exploring Inequalities
North Shore High School	Alexander	Lacomba	Circle Area Dissection
Oceanside High School	Paige	McMahon	Analysis of Concussions using Chi-Square Distributions
Oceanside High School	Risa	Zucker	Optimal Arc of the 3 Point Shot

SILVER

East Meadow High School	Rumana	Rahman	Definite Integrals
Garden City High School	Yianni	Flouskakis	Bioinformation
Herricks High School	Bhakti K.	Patel	Optimization
Herricks High School	Nisarg	Patel	Zipf's Law
Manhasset High School	Julia	Henry	The Calculus of Rocket Science
Manhasset High School	Elizabeth	Petras	The Mathematics of the Human Cough
North Shore High School	Sara	Abbondandolo	Curious Derivative Patterns
North Shore High School	Stephanie	Bazan	Solving Quadratics Using Area
North Shore High School	Talia	Pelts	Forcing Congruence
Oceanside High School	Jason	Zagorski	Gabriel's Horn Extension
The Wheatley School	Krista	Chen	Extensions of the Birthday Problem
The Wheatley School	Arihat	Jain	Maxwell's Equations
The Wheatley School	Mohammad	Khanzada	Mathematics of Horseracing and Betting

GOLD

East Meadow High School	Zainab	Nathani	The Mathematics of Phylogeny
Garden City High School	Tianna	Biscone	Poverty and Income explained by Calculus
HAFTR	Justin	Lish	A Comparison of Plane and Spherical Trigonometry
Herricks High School	Sahil	Abbi	Isomorphism
Hicksville Schools	Nitya	Mulani	Kelly Criterion
Manhasset High School	Caprice	Catalano	Mathematics of Water Purification
Manhasset High School	Alyssa	Sanders	Glottochronology: Language Development in the Context of Calculus
North Shore High School	Gabrielle	Farb	Tangent Lines to Cubics
North Shore High School	Cecilia	Nelson	Dividable Triangles
North Shore High School	Miranda	Purcell	Triangle Constrictions

North Shore High School	Julia	Reilly	Minimizing Cylindrical Distance
North Shore High School	Diana	Vizza	Optical & Eccentric Conics
North Shore High School	Stephanie	Zelenetz	Regions That Cevians Create
Syosset High School	Jack	Grunberg	Newton's Method
Syosset High School	Arjun	Mehrotra	An Application of Cluster Analysis to Brain Connectivity
The Wheatley School	Christopher	Shen	The Geometry of spacetime
The Wheatley School	Andrew	Zuckerman	Semi-Automatic Segmentation and Aut