

26th ANNUAL UNC STATE MATHEMATICS CONTEST

The Final Round was held at the University of Northern Colorado, January 20, 2018

TOP 16 WINNERS

RANK	NAME	SCHOOL	Gr	TEACHERS
1	Austen Mazenko	Cherry Creek	10	Jim Padavic
2	Hannah Zhang	Fairview	12	Silva Chang, Emily Silverman
3 (tie)	Andrea Lin	Fairview	12	Emily Silverman, Silva Chang, Ming Song
3 (tie)	Rahul Thomas	Cherry Creek	9	Jim Padavic
5	Anudeep Golla	Fairview	10	Emily Silverman, Del Ebadi, Brad Arehart, Silva Chang
*G	Alex Bean	Clark	10	Hikmet Erdogan
6 (tie)	Siddarth Ijju	Cherry Creek	10	Jim Padavic
6 (tie)	Derwin Wu	Cherry Creek	11	Jim Padavic
*G	Korben DiArchangel	CASLV	12	Hikmet Erdogan
8 (tie)	Andrew Huycke	Regis Jesuit	9	Laura Jones
8 (tie)	Eric Webb	George Washington	12	Aurora Simoneau, Joseph Bolz
8 (tie)	Stephanie Zhang	Fairview	12	Silva Chang, Emily Silverman
11 (tie)	Sonia Chu	Rock Canyon	11	Ming Song, Erynn Albert, Silva Chang
11 (tie)	Michael Hu	Cherry Creek	11	Ming Song
13	Quinn Perian	Summit	8	Tanya de Nobrega
14	Luke Zhang	Rock Canyon	12	Erynn Albert
15	Kyle Wang	Fairview	9	Emily Silverman
16	Kevin Yang	Fairview	10	Del Ebadi, Silva Chang

ADDITIONAL WINNERS

Daniel Rui	Peak to Peak	10	Joe Howard
Ross Blackburn	Valor Christian	12	Gabe Anderson
Cynthia Lin	Fairview	11	Emily Silverman, Silva Chang
Sarah Gao	Cherry Creek	11	Jim Padavic
Randy Ngo	George Washington	9	Aurora Simoneau
Edward Lim	Fort Collins	9	Craig Luckasen
Hannah Park	Poudre	11	Elissa Pitts
Grace Zhang	Grandview	9	Weiming Zhang, John Schultz
Anthony Chui	Rocky Heights	7	Ming Song

The winners listed above are invited, along with their families and teachers, to a banquet to be held in their honor on Sunday, April 8, 2018 in the Columbine Room at the UNC Student Center.

*G indicates guest participants. Several schools in Nevada participate in the contest as guests. The participants from outside Colorado are not assigned numbered places, but their ranks are shown.

26th ANNUAL UNC STATE MATHEMATICS CONTEST 2018
HONORABLE MENTIONS (by grade)

Taha Krarti	Niwot	12	Silva Chang
Aileen Ma	Niwot	12	Dylan Wittstruck, Silva Chang
Griffin Hampton	Arapahoe	12	Kyle Low
Mario Peraza		12	Hikmet Erdogan
Alan Yu	Niwot	11	Dylan Wittstruck
Amber Liu	Rock Canyon	11	Erin Albert, Ming Song
Jason Lin	CASLV	11	Hikmet Erdogan
Titus Sharman	Coronado	11	Jacob Wade
Takatoshi Soeda	Windsor	11	Laura Holt
Brian Park	Fairview	11	Robert Deeley, Su-ion Ih
Lucas Nelson	Loveland	11	Liz Howe
Akshunna Vaishnav	Cherry Creek	11	Jim Padavic
Nathan Miao	Cherry Creek	10	Jim Padavic
Henry Cafaro	Fort Collins	10	Craig Luckasen
Sophia Zhai	Fairview	10	
David Jordan	Home School	10	Stephen Jordan
Vatsal Shrivastava	Cherry Creek	10	Jim Padavic
Brandon Guo	Peak to Peak	10	Joseph Howard
Henry Shugart	George Washington	10	Aurora Simoneau
Spencer Mielstrup	Longmont	10	Eric Eiseman
Emilie Xu	Fairview	10	Del Ebadi, Jack Cawelti
Spencer Rhodes	CASLV	9	hikmet Erdogan
Sahi Chundu	CASLV	9	Hikmet Erdogan
Brandon Dong	Cherry Creek	9	Jim Padavic
Liam Adler-Pollock	George Washington	9	Aurora Simoneau, Shapiro
Madison lin	Peak to Peak	9	Joseph Howard
Ryan Zhang	Fossil Ridge	9	Martha Cranor
Hannah Wang	Hulstrom	8	Angela Newberry, David Wang
Ellie Greyson	West	8	Joanne Parkhouse
Aiden Lee	Campus	8	Jim Padavic
Anthony Wang	Cresthill	8	Merry Wong
Zion Choi	Challenge	8	Matt Bixby
Rajeev Roy	Mountain Ridge	7	Christine Draper

26th ANNUAL UNC STATE MATHEMATICS CONTEST 2018

JUNIOR HONORABLE MENTIONS (by grade)

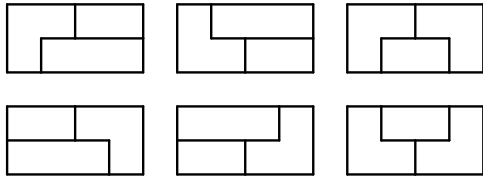
Carter Kruse	Niwot	9	Dylan Wittstruck
Jared Keller	CASLV	9	Hikmet Erdogan
Sriya Surapaneni	Rock Canyon	9	Erynn Albert
Rommel Mejia Miquirray	CASLV	9	Hikmet Erdogan
Zachary Rose	CASLV	9	Hikmet Erdogan
Katrina Nelson	Loveland	9	Greg Morrison, Christine Marshall
Leo Ge	Summit	8	Tanya de Nobrega
Emily Zhang	Campus	8	Ming Song
Masha Osovskaya	West	8	Joanne Parkhouse
Matthew Anderson	Challenge	8	Matt Bixby
Stephen Zhang	Campus	8	Ming Song
Abbas Shaikh	West	8	Joanne Parkhouse
Andrew Zirger	Summit	8	Tanya de Nobrega
Andrew Wang	Wang	8	Merry Wong
Maya Vendhan	STEM	7	Silva Chang
Alexander Marsh	Ridgeview	7	Mr Yin
Ari Wang	Mountain Ridge	7	Christine Draper
Samuel J Degen	Westview	7	Mr Thompson
Tanishga Puhan	Challenge	7	Matt Bixby
Steven Zhou		7	Ming Song
Ava Somer	Peak to Peak	6	Joe Howard
Austin Zhang	Challenge	5	Matt Bixby
Abhinav Krishna	Challenge	5	Matt Bixby

Twenty-sixth Annual UNC Math Contest

2017-2018

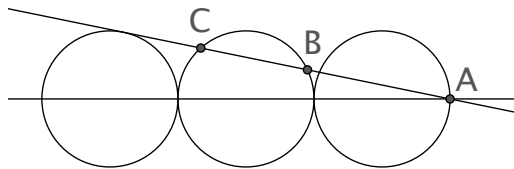
Summary of Final Round Results

The first place winner submitted flawless solutions. Three students successfully completed



all four Seripian Quests, correctly mining the P's and Q's in question 10, about tiling with pit-coins. Five more completed two of the four quests and forty-two students successfully enumerated the P(6) tilings.

Twelve students saw how to use the result about the hyperbola in question 3 to demonstrate, for question 11, that there are an infinite number of integers n for which $1 + 2 + \dots + n^2$ is a perfect square. Fifty-three students recognized the Fibonacci pattern in the Grassilian sets of question 9, and fifteen students gave solid proofs that the Grassilian pattern was, in fact, the Fibonacci recursion. Twenty one students saw how to obtain the remainder in the polynomial division of question 8. There were several good ways to approach that question.



Thirty one students obtained the length of chord BC in question 5, with three circles. The number of students in each grade answering each question correctly is shown in the table below. A number of other students made progress on each of the questions.

As always, we have enjoyed looking at your papers. We appreciate the neat work and careful penmanship. We are always struck by how much you can accomplish in three hours. Keep up the good work. We look forward to next year.

Grade	#papers	1	2	3	4	5	6	7	8	9a,b	9c	10a	10b	10c,d	11a	11b
5,6	11	8	6	0	1	0	2	1	0	0	0	3	0	0	3	0
7	21	10	10	5	3	1	5	3	0	4	0	7	1	0	5	0
8	48	27	28	14	11	4	16	10	2	9	1	6	0	0	8	0
9	32	18	24	7	17	4	17	10	3	10	3	5	1	0	12	3
10	25	18	18	13	8	6	17	7	6	7	2	7	3	2	10	1
11	29	23	15	13	13	8	18	9	6	12	2	10	1	0	10	3
12	23	15	20	13	11	8	15	11	4	11	7	4	2	1	11	5
<i>Total</i>	189	119	121	65	64	31	90	51	21	53	15	42	8	3	59	12
