

calculus bc ap score distribution

calculus bc ap score distribution plays a critical role in understanding how students perform in the Advanced Placement (AP) Calculus BC exam. The score distribution provides insights into the overall performance of students and reflects the difficulty of the exam, as well as the effectiveness of preparation strategies. This article will delve into the nuances of the AP Calculus BC score distribution, covering key aspects such as historical performance trends, the scoring scale, factors influencing scores, and effective preparation strategies for students. By analyzing this distribution, educators, students, and parents can better understand the landscape of AP Calculus BC and make informed decisions regarding study practices and expectations.

- Understanding the AP Calculus BC Score Distribution
- Historical Trends in AP Calculus BC Scores
- The Scoring Scale Explained
- Factors Influencing AP Calculus BC Scores
- Effective Study Strategies for AP Calculus BC
- Final Thoughts on AP Calculus BC Score Distribution

Understanding the AP Calculus BC Score Distribution

The AP Calculus BC score distribution is a statistical representation of how students performed on the exam in a given year. This distribution is typically presented as a percentage of students achieving each score from 1 to 5. A score of 5 indicates exceptional understanding and mastery of the material, while a score of 1 reflects a lack of understanding. The distribution can provide insights into the overall difficulty of the exam and the effectiveness of student preparation.

Each year, the College Board releases data showing the percentage of students achieving each score, allowing educators and students to gauge their performance relative to their peers. Understanding this distribution can be instrumental in setting realistic goals for performance and in evaluating the effectiveness of different study methods.

Historical Trends in AP Calculus BC Scores

Examining historical trends in AP Calculus BC scores can reveal valuable patterns and shifts in student performance over the years. The data indicates fluctuations in the percentage of students scoring 1 through 5, which may correlate with changes in curriculum standards, the introduction of new teaching methodologies, and even variations in student demographics.

For instance, a review of the last decade shows that the percentage of students scoring a 5 has generally hovered around 20% to 25%. This trend suggests that while a significant number of

students achieve high scores, there remains a considerable opportunity for academic improvement. Additionally, the percentage of students scoring a 1 has varied, typically falling between 10% and 15%, indicating that some students may not be adequately prepared for the exam.

The Scoring Scale Explained

The AP Calculus BC exam utilizes a scoring scale that ranges from 1 to 5, with each score reflecting a different level of proficiency in calculus concepts. Understanding this scale is crucial for students aiming for college credit, as many institutions grant credit for scores of 3 and above.

Score Breakdown

The breakdown of the scores is as follows:

- **Score 5:** Extremely well qualified
- **Score 4:** Well qualified
- **Score 3:** Qualified
- **Score 2:** Possibly qualified
- **Score 1:** No recommendation

This scale not only serves as a benchmark for student performance but also assists colleges in determining which students may be ready for advanced coursework. Understanding where they fall within this scale can help students identify their strengths and areas needing improvement.

Factors Influencing AP Calculus BC Scores

Several factors can influence the scores students achieve on the AP Calculus BC exam. Recognizing these factors can aid in developing effective study strategies and improving performance.

Preparation and Study Habits

One of the most significant factors affecting scores is the preparation method used by students. Effective study habits can include a combination of classroom learning, self-study, and practice exams. Engaging with study groups or seeking help from teachers can also enhance understanding of complex topics.

Test-Taking Strategies

Test-taking strategies also play a crucial role in performance. Students who practice time management during the exam and become familiar with the exam format are likely to perform better. Understanding how to approach multiple-choice questions and free-response problems can

significantly impact overall scores.

Instructor Quality and Curriculum

The quality of instruction and the curriculum offered at a student's school can also influence scores. Experienced teachers who utilize effective teaching strategies and provide ample resources can greatly enhance student understanding and preparedness.

Effective Study Strategies for AP Calculus BC

To excel in the AP Calculus BC exam, students should adopt effective study strategies tailored to the exam's content and structure. Here are several recommended strategies:

- **Review the Course Syllabus:** Familiarity with the syllabus helps identify key topics that are likely to appear on the exam.
- **Practice with Past Exams:** Working through previous years' exams can provide invaluable insight into question formats and difficulty levels.
- **Utilize Study Guides and Resources:** Leverage AP Calculus BC study guides and online resources to reinforce learning.
- **Join Study Groups:** Collaborating with peers can enhance understanding and retention of challenging concepts.
- **Seek Help When Needed:** Don't hesitate to ask teachers for clarification on difficult topics or concepts.

By implementing these strategies, students can improve their understanding of calculus concepts and increase their chances of achieving a higher score on the exam.

Final Thoughts on AP Calculus BC Score Distribution

The AP Calculus BC score distribution is a vital tool for understanding student performance and preparedness for college-level mathematics. By analyzing historical trends and the factors that influence scores, students and educators can develop effective strategies to enhance learning outcomes. The insights gained from the score distribution not only guide students in their preparation but also assist educational institutions in assessing and improving their curriculum and teaching methods. Ultimately, a thorough understanding of the calculus BC AP score distribution can empower students to achieve their academic goals and succeed in their future studies.

Q: What is the average AP Calculus BC score distribution?

A: The average AP Calculus BC score distribution typically shows about 20%-25% of students

achieving a score of 5, around 25%-30% scoring a 4, and approximately 25%-30% receiving a score of 3. The remaining students usually score lower, indicating a wide range of understanding among test-takers.

Q: How does the AP Calculus BC exam differ from AP Calculus AB?

A: The AP Calculus BC exam covers more advanced topics than the AP Calculus AB exam, including series, parametric equations, and polar coordinates. While both exams assess understanding of calculus concepts, BC is designed for students who have a stronger foundation in mathematics.

Q: How can students improve their chances of getting a high score in AP Calculus BC?

A: Students can improve their chances of achieving a high score by employing effective study habits, practicing with past exams, participating in study groups, and seeking help from teachers. Time management during the exam is also crucial.

Q: What resources are recommended for AP Calculus BC preparation?

A: Recommended resources for AP Calculus BC preparation include AP review books, online courses, educational videos, and practice exams available on the College Board website. Engaging with calculus-focused websites and forums can also provide additional support.

Q: What role does the teacher play in a student's AP Calculus BC score?

A: The teacher plays a significant role in a student's AP Calculus BC score by providing quality instruction, resources, and support. Experienced teachers can effectively convey complex concepts and help students develop strong problem-solving skills.

Q: Are the AP Calculus BC exams graded fairly?

A: Yes, AP Calculus BC exams are graded fairly as they follow a standardized scoring procedure. The College Board employs trained examiners to ensure consistency and fairness in grading, which is crucial for maintaining the integrity of the exam.

Q: What should students do if they receive a low score on the AP Calculus BC exam?

A: If students receive a low score on the AP Calculus BC exam, they should analyze their performance to identify areas needing improvement. Seeking additional help, enrolling in remedial

courses, and revisiting study strategies can assist in better performance if they choose to retake the exam.

Q: How does the AP Calculus BC score affect college admissions?

A: The AP Calculus BC score can positively impact college admissions, especially for students applying to programs that emphasize quantitative skills. A high score may demonstrate a student's readiness for college-level coursework and strengthen their application.

Q: What is the significance of achieving a score of 3 or higher on the AP Calculus BC exam?

A: Achieving a score of 3 or higher on the AP Calculus BC exam is significant as it often qualifies students for college credit at many universities. It indicates a solid understanding of calculus concepts, which can benefit students in their future academic pursuits.

Calculus Bc Ap Score Distribution

Find other PDF articles:

<http://www.speargroupllc.com/algebra-suggest-006/Book?ID=peh61-0814&title=how-to-study-linear-algebra.pdf>

calculus bc ap score distribution: AP® Calculus AB & BC Crash Course 3rd Ed., Book + Online J. Rosebush, Flavia Banu, 2021-03-12 AP® Calculus AB & BC Crash Course - updated for today's 2025-2026 digital exam! A Higher Score in Less Time! REA's Crash Course quick-review study guide is the top choice for AP® students who want to make the most of their study time and earn a high score. Here's why more AP® teachers and students turn to REA's AP® Calculus Crash Course: Targeted, Focused Review – Study Only What You Need to Know. REA's new 3rd edition addresses all the latest 2025-2026 test revisions. We cover only the information tested on the exam, so you can make the most of your valuable study time. Expert Test-taking Strategies and Advice. Authored by a team of AP® Calculus teachers, the book gives you the tips and topics that matter most on exam day. Crash Course relies on the authors' extensive analysis of the test's structure and content. By following their advice, you can boost your score in every section of the test. Realistic Practice Questions – a Mini-Test in the Book, a Full-Length Exam Online. Are you ready for your exam? Try our focused practice set inside the book. Then take our full-length online practice exam (one each for Calculus AB & BC) to ensure you're ready for test day. Please note: In the United States, this is a hybrid digital/paper exam. Students complete multiple-choice questions and view free-response questions in the Bluebook app. They handwrite their free-response answers in paper exam booklets that are returned for scoring. If you're cramming for the exam or looking for a concise course review, Crash Course is the study guide every AP® student needs. About Our Authors Joan Marie Rosebush teaches calculus courses at the University of Vermont. Ms. Rosebush has taught mathematics to elementary, middle school, high school, and college students. She taught

AP® Calculus via satellite television to high school students scattered throughout Vermont. Ms. Rosebush earned her B.A. degree in elementary education, with a concentration in mathematics, at the University of New York in Cortland, N.Y. She received her Master's Degree in education from Saint Michael's College, Colchester, Vermont. Flavia Banu graduated from Queens College of the City University of New York with a B.A. in Pure Mathematics and an M.A. in Pure Mathematics in 1997. Ms. Banu was an adjunct professor at Queens College where she taught Algebra and Calculus II. Currently, she teaches mathematics at Bayside High School in Bayside, New York, and coaches the math team for the school. Her favorite course to teach is AP Calculus because it requires “the most discipline, rigor and creativity.” About Our Revisions Editor Stu Schwartz has been teaching mathematics since 1973. For 35 years he taught in the Wissahickon School District, in Ambler, Pennsylvania, specializing in AP Calculus AB and BC and AP Statistics. Mr. Schwartz received his B.S. degree in Mathematics from Temple University, Philadelphia. Mr. Schwartz was a 2002 recipient of the Presidential Award for Excellence in Mathematics Teaching and also won the 2007 Outstanding Educator of the Year Award for the Wissahickon School District. Mr. Schwartz's resource-rich website, www.mastermathmentor.com, is geared toward helping educators teach AP® Calculus, AP® Statistics, and other math courses. Mr. Schwartz is always looking for ways to provide teachers with new and innovative teaching materials, believing that it should be the goal of every math teacher not only to teach students mathematics, but also to find joy and beauty in math as well.

calculus bc ap score distribution: Cornell University Courses of Study Cornell University, 2002

calculus bc ap score distribution: AP® Statistics Crash Course, For the 2020 Exam, Book + Online Michael D'Alessio, 2020-02-14 For the 2020 Exam! AP® Statistics Crash Course® A Higher Score in Less Time! Crash Course is perfect for the time-crunched student, the last-minute studier, or anyone who wants a refresher on the subject. Are you crunched for time? Have you started studying for your Advanced Placement® Statistics exam yet? How will you memorize everything you need to know before the test? Do you wish there was a fast and easy way to study for the exam AND boost your score? If this sounds like you, don't panic. REA's Crash Course for AP® Statistics is just what you need. Our Crash Course gives you: Targeted, Focused Review - Study Only What You Need to Know The Crash Course is based on an in-depth analysis of the AP® Statistics course description outline and actual AP® test questions. It covers only the information tested on the exam, so you can make the most of your valuable study time. Written by an experienced AP® Statistics teacher, our easy-to-read format gives you a crash course in exploring data, planning a study, anticipating patterns, and statistical inferences. Expert Test-taking Strategies Our AP® author shares detailed question-level strategies and explains the best way to answer the questions you'll find on the AP® exam. By following his expert advice, you can boost your overall point score! Practice questions - a mini-test in the book, a full-length exam online. Are you ready for your exam? Try our focused practice set inside the book. Then go online to take our full-length practice exam. You'll get the benefits of timed testing, detailed answers, and automatic scoring that pinpoints your performance based on the official AP® exam topics - so you'll be confident on test day. Whether you're cramming for the exam or looking to recap and reinforce your teacher's lessons, Crash Course® is the study guide every AP® student needs. About the Author Michael D'Alessio earned his B.S. in Biology from Seton Hall University and his M.S. in Biomedical Sciences from the University of Medicine and Dentistry of New Jersey. In 2004, he earned his Executive Masters of Arts in Educational Leadership from Seton Hall University. Mr. D'Alessio has had an extensive career teaching all levels of mathematics and science, including AP® statistics, chemistry, biology, physics, algebra, calculus and geometry. In 2003, Mr. D'Alessio received the Governor's Teacher of the Year recognition for Watchung Hills Regional High School. In 2004, Mr. D'Alessio received a Certificate of Recognition of Excellence in Science Teaching from Sigma Xi, the Scientific Research Society of Rutgers University and in 2005, he was voted National Honor Society Teacher of the Year by the students of Watchung Hills. Currently, Mr. D'Alessio serves as the Supervisor of the

Mathematics and Business Department at Watchung Hills Regional High School in Warren, New Jersey, overseeing 30 teachers.

calculus bc ap score distribution: Girls and Women of Color In STEM Barbara Polnick, Julia Ballenger, Beverly Irby, Nahed Abdelrahman, 2020-09-01 Though there has been a rapid increase of women's representation in law and business, their representation in STEM fields has not been matched. Researchers have revealed that there are several environmental and social barriers including stereotypes, gender bias, and the climate of science and engineering departments in colleges and universities that continue to block women's progress in STEM. In this book, the authors address the issues that encounter women of color in STEM in higher education.

calculus bc ap score distribution: The Annual Condition of Education Report , 1995

calculus bc ap score distribution: Women and Minorities in Science and Engineering , 1990

calculus bc ap score distribution: Psychology of Individual Differences: Intelligence Gregory John Boyle, Donald H. Saklofske, 2004

calculus bc ap score distribution: The Psychology of Individual Differences: Intelligence Gregory John Boyle, Donald H. Saklofske, 2004 A comprehensive, up-to-date and international synthesis of some of the most significant publications in the psychology of individual differences over the past two decades, including highly cited empirical articles, critical review articles, and key book chapters that have influenced debates in the field.

calculus bc ap score distribution: College Placement and Credit by Examination College Entrance Examination Board, 1978

calculus bc ap score distribution: General Catalog -- University of California, Santa Cruz University of California, Santa Cruz, 2000

calculus bc ap score distribution: Higher Education in the United States James J. F. Forest, Kevin Kinser, 2002-06-21 Surveys the changing landscape of American higher education, from academic freedom to virtual universities, from campus crime to Pell Grants, from the Student Privacy Act to student diversity. In the years following World War II, college and university enrollment doubled, students revolted, faculty unionized, and community colleges evolved. Tuition and technology soared, as did the number of first-generation, minority, and women students. These changes radically transformed the American system of postsecondary education. Today, that system is in trouble. Its aging professoriate prepares for retirement, but low academic salaries can no longer attract the best minds to replace them. A flood of corporate dollars funds commercial research, but money for basic research—the seedbed of American scientific preeminence—has dried up. Colleges and universities also face heated competition with for-profit education providers for students, faculty, and external financial support, along with the costs of providing remedial education to growing numbers of students who are unprepared for postsecondary education. Higher Education in the United States provides a comprehensive analysis of these issues and others that scholars and practitioners of higher education study, discuss, and grapple with on a daily basis.

calculus bc ap score distribution: Catalogue Number. Course Catalog Anonymous, 2025-08-07 Reprint of the original, first published in 1876. The Antigonos publishing house specialises in the publication of reprints of historical books. We make sure that these works are made available to the public in good condition in order to preserve their cultural heritage.

calculus bc ap score distribution: Peterson's 440 Colleges for Top Students , 2007-05 Presents alphabetized profiles of 440 competitive colleges in the U.S. and Canada, providing contact information and covering academics, the student body, facilities and resources, campus life, safety, and application requirements and deadlines; and includes A Parent's Guide to Paying for College on a CD, presented in English and Spanish.

calculus bc ap score distribution: Michigan Postsecondary Admissions & Financial Assistance Handbook Michigan. Department of Education, 1999

calculus bc ap score distribution: My Max Score AP Calculus AB/BC Carolyn Wheeler, 2011 Provides test-taking tips and strategies, reviews topics on the test, and includes a full-length practice

exam with answers and explanations.

calculus bc ap score distribution: Peterson's Competitive Colleges Peterson's, 2007-04
Peterson's Competitive Colleges is a selective college guide of 440 chosen colleges and universities with entering-class statistics indicating they routinely attract and admit an above-average share of the nation's high-achieving students. Each institution has a full-page statistical profile. Sponsors are given the opportunity to have a 100-word announcement on the subject of their choice appear with their profile.

calculus bc ap score distribution: A Multidimensional Study of Dental Health in Urban Norwegian Adults Espen Bjertness, 1990

calculus bc ap score distribution: AP Calculus BC Lecture Notes Rita Korsunsky, 2014-08-26
Imagine having interactive Powerpoint lectures that illustrate every problem, walking you through the procedure step-by-step. Imagine having every proof, illustration, or theorem explained concisely and accurately. This book contains printouts of all the Powerpoint presentations on topics covered by the entire Calculus BC curriculum and tested on the BC Exam. You can take notes on this book, study from it, and use it as test preparation material for chapter tests as well as for the AP test. At the end of this book, you will find the list of all the formulas and theorems needed for the AP test. These lecture notes can be used for both review and learning, and are a perfect fit for every student no matter their current knowledge of Calculus. Every example and every lesson targets a specific skill or formula. With this book, you will have every concept you need to know at the tip of your fingers. Our books are written by Mrs. Rita Korsunsky, a High School Mathematics Teacher with more than fifteen years of experience teaching AP Calculus BC. Her lectures are rigorous, entertaining, and effective. Her students' AP Scores speak for themselves: 100% of her students pass the AP Exam. Around 90% of her students get 5 on the AP Exam. For more information and testimonials please visit www.mathboat.com

calculus bc ap score distribution: Cumulated Index Medicus, 1974

calculus bc ap score distribution: AP® Calculus AB & BC Crash Course Book + Online Joan Rosebush, 2016-10-06
REA's Crash Course for the AP® Calculus AB & BC Exams - Gets You a Higher Advanced Placement® Score in Less Time 2nd Edition - Updated for the 2017 Exams
Crash Course is perfect for the time-crunched student, the last-minute studier, or anyone who wants a refresher on the subject. Are you crunched for time? Have you started studying for your Advanced Placement® Calculus AB & BC exams yet? How will you memorize everything you need to know before the tests? Do you wish there was a fast and easy way to study for the exams AND boost your score? If this sounds like you, don't panic. REA's Crash Course for AP® Calculus AB & BC is just what you need. Our Crash Course gives you: Targeted, Focused Review - Study Only What You Need to Know. The Crash Course is based on an in-depth analysis of the AP® Calculus AB & BC course description outline and actual AP® test questions. It covers only the information tested on the exams, so you can make the most of your valuable study time. Written by an experienced AP® Calculus instructor, the targeted review chapters prepare students for the test by only focusing on the topics tested on the AP® Calculus AB & BC exams. Our easy-to-read format gives students a crash course in AP® Calculus AB & BC and covers functions, graphs, units, derivatives, integrals, and polynomial approximations and series. Expert Test-taking Strategies Our author shares detailed question-level strategies and explain the best way to answer AP® questions you'll find on the exams. By following this expert tips and advice, you can boost your overall point score! Take REA's Practice Exams After studying the material in the Crash Course, go to the online REA Study Center and test what you've learned. Our free practice exams (one online for both Calculus AB and Calculus BC) features timed testing, detailed explanations of answers, and automatic scoring analysis. Each exam is balanced to include every topic and type of question found on the actual AP® exam, so you know you're studying the smart way. Whether you're cramming for the test at the last minute, looking for extra review, or want to study on your own in preparation for the exams - this is the study guide every AP® Calculus AB & BC student must have. When it's crucial crunch time and your Advanced Placement® exam is just around the corner, you need REA's Crash Course for AP® Calculus AB &

BC!

Related to calculus bc ap score distribution

Ch. 1 Introduction - Calculus Volume 1 | OpenStax In this chapter, we review all the functions necessary to study calculus. We define polynomial, rational, trigonometric, exponential, and logarithmic functions

Calculus Volume 1 - OpenStax Study calculus online free by downloading volume 1 of OpenStax's college Calculus textbook and using our accompanying online resources

Calculus - OpenStax Explore free calculus resources and textbooks from OpenStax to enhance your understanding and excel in mathematics

1.1 Review of Functions - Calculus Volume 1 | OpenStax Learning Objectives 1.1.1 Use functional notation to evaluate a function. 1.1.2 Determine the domain and range of a function. 1.1.3 Draw the graph of a function. 1.1.4 Find the zeros of a

Preface - Calculus Volume 1 | OpenStax Our Calculus Volume 1 textbook adheres to the scope and sequence of most general calculus courses nationwide. We have worked to make calculus interesting and accessible to students

Preface - Calculus Volume 3 | OpenStax OpenStax is a nonprofit based at Rice University, and it's our mission to improve student access to education. Our first openly licensed college textboo

Index - Calculus Volume 3 | OpenStax This free textbook is an OpenStax resource written to increase student access to high-quality, peer-reviewed learning materials

A Table of Integrals - Calculus Volume 1 | OpenStax This free textbook is an OpenStax resource written to increase student access to high-quality, peer-reviewed learning materials

2.4 Continuity - Calculus Volume 1 | OpenStax Throughout our study of calculus, we will encounter many powerful theorems concerning such functions. The first of these theorems is the Intermediate Value Theorem

2.1 A Preview of Calculus - Calculus Volume 1 | OpenStax As we embark on our study of calculus, we shall see how its development arose from common solutions to practical problems in areas such as engineering physics—like the space travel

Related to calculus bc ap score distribution

University High student earns perfect score on AP calculus test (Arizona Daily Star8y) Walker Kroubalkian said he didn't pay much mind to an advance placement test he'd taken five months ago. The University High School student took the AP calculus exam in May. He'd hoped for a 5, which

University High student earns perfect score on AP calculus test (Arizona Daily Star8y) Walker Kroubalkian said he didn't pay much mind to an advance placement test he'd taken five months ago. The University High School student took the AP calculus exam in May. He'd hoped for a 5, which

2 high school students in San Jose get perfect score on AP Calculus test (NBC Bay Area2y) Two Silver Creek High School students in San Jose earned a perfect score on their AP Calculus BC test, East Side Union High School District officials said. A total of 136,000 students took the test

2 high school students in San Jose get perfect score on AP Calculus test (NBC Bay Area2y) Two Silver Creek High School students in San Jose earned a perfect score on their AP Calculus BC test, East Side Union High School District officials said. A total of 136,000 students took the test

Son of immigrants achieves rare feat - earns perfect score on AP calculus test (Fox News9y) A Los Angeles High School senior achieved a remarkable feat this week when he became only one of 12 students in the world to have gotten a perfect score on his calculus AP exam. Cedrick Argueta, 17,

Son of immigrants achieves rare feat - earns perfect score on AP calculus test (Fox News9y) A Los Angeles High School senior achieved a remarkable feat this week when he became only one of 12 students in the world to have gotten a perfect score on his calculus AP exam. Cedrick Argueta, 17,

Indiana high school student becomes 1st in world to get perfect score on AP calculus exam (ABC30 Action News3y) ST. JOSEPH COUNTY, Ind. -- An Indiana high school student has become the only person in the world to land a perfect score on an AP calculus exam. Denise White has taught different levels of calculus

Indiana high school student becomes 1st in world to get perfect score on AP calculus exam (ABC30 Action News3y) ST. JOSEPH COUNTY, Ind. -- An Indiana high school student has become the only person in the world to land a perfect score on an AP calculus exam. Denise White has taught different levels of calculus

San Jose students earn rare perfect scores on AP calculus exam (KRON4 News2y) (KRON) — Two high school students in San Jose achieved perfect scores on their AP calculus exams, school officials announced Monday. The stellar students, Ritwin Narra and Kaylee Nguyen, secured all

San Jose students earn rare perfect scores on AP calculus exam (KRON4 News2y) (KRON) — Two high school students in San Jose achieved perfect scores on their AP calculus exams, school officials announced Monday. The stellar students, Ritwin Narra and Kaylee Nguyen, secured all

2 San Jose students get perfect score on AP calculus exam (KTVU1y) SAN JOSE, Calif. - Two South Bay high schoolers achieved quite the accomplishment, getting a perfect score on their AP Calculus BC exams. Ritwin Narra and Kaylee Nguyen of Silver Creek High School in

2 San Jose students get perfect score on AP calculus exam (KTVU1y) SAN JOSE, Calif. - Two South Bay high schoolers achieved quite the accomplishment, getting a perfect score on their AP Calculus BC exams. Ritwin Narra and Kaylee Nguyen of Silver Creek High School in

Back to Home: <http://www.speargroupllc.com>