



WEST BLOOMFIELD SCHOOL DISTRICT
PORTRAIT of a GRADUATE

MATHCOUNTS 2020-21

Community Education

COACHES: AARYAN CHANDNA AND VARUN TALLURI



About MathCounts

- MathCounts is a national math competition for students in grades 6-8
 - There are 4 rounds this year: Chapter, Chapter Invitational, State and National Competition
 - Up to 15 members from WBMS(in advanced math classes) can compete in the Chapter Competition, and from there the top performers advance to the Chapter Invitational, and eventually top performers reach the State and National Competitions
 - Each round of competition consists of 4 rounds: Sprint, Target, Team, and Countdown
- Tests cover information ranging from basic arithmetic to advanced topics such as algebra, geometry, combinatorics, and number theory

Why Enroll in Mathcounts

- It's a fun experience, and the problem-solving skills gained from solving advanced math problems can help in the future
- Joining MathCounts not only helps with performance in math competitions, it is also valuable to scoring high on standardized tests such as SAT/ACT as well as performing well in school math classes
- Each year, there are hundreds of thousands of students nationally who participate in MathCounts programs
 - Several high-achieving schools in the area (Novi, Troy, Bloomfield Hills, Detroit Country Day, etc) have a strong MathCounts program, so enrolling in MathCounts provides an opportunity to compete with the best students in the state, and in the nation

Our Coaches

Aaryan Chandna is a junior at WBHS. During middle school, he participated in MathCounts and qualified for the 2018 National Competition in 8th grade, where he placed 45th. He also has achieved top 1% in the nation for AMC(American Mathematics Competitions) 10 in 2020. Outside of math contests, he is the captain of the Varsity Tennis Team, he is a programmer for Team 4737, he is a part of stocks club, and he is an officer in WB DECA.

Varun Talluri is a sophomore at the International Academy Okma Campus. In middle school, he competed in MathCounts and placed 5th at the chapter competition in 7th grade. Outside of math contests, he is on the Varsity Tennis Team and is a programmer for Team 469. Additionally, he is the founder of the Current Events Club and is a part of investing and economics club at the IA.

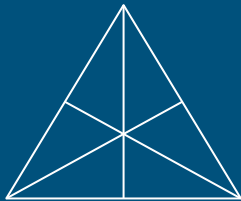
Structure

- This program is designed for students in advanced math(at least one grade ahead in math) who would like a challenge
- It will cost \$40 per student to register for the whole season
- **All practices and the competition will be held online this year:**
 - Every Thursday, from 4-5:30, we plan to hold MathCounts practices through Zoom
 - In these practices, we will cover test-taking tips, various advanced mathematics concepts, and shortcuts to solving seemingly difficult practices
 - Additionally, we will hold mock tests to monitor a student's growth throughout the season
 - As we get closer to the Chapter Competition(Test Window February 5-6), we will start to hold other practices outside of the normal Thursday session in order to help prepare the students

Example Problems

Here are two examples of MathCounts problems. Both of these problems would be considered medium level Chapter Competition problems.

1. Mya's truck has a fuel tank that holds 12 gallons of gas, and she can drive an average of 22 miles per gallon of gas. If Mya leaves home with a full tank of gas, drives directly to her lake house, and arrives with exactly $\frac{1}{8}$ tank of gas remaining, how far does Mya travel from her home to the lake house?
2. How many triangles are in this figure shown?



Answers:
1. 231
2. 16

Conclusion

All in all, MathCounts is an opportunity for students to become better mathematicians. Students will learn various concepts that will prepare them for mathematics in middle school and even throughout high school. Additionally, students will refine their problem solving skills and become better out-of-the-box thinkers. We hope you have seen the profound influence MathCounts can have on students and will consider joining. Our emails, along with a link to the MATHCOUNTS website, is down below:

varunt2023@gmail.com and achandna101@gmail.com

<https://www.mathcounts.org/>