

Math Club



Mandelbrot Fractal



Welcome!

- ★ Frank Xiao
- ★ Gilbert Chang
- ★ Srish Nigam
- ★ Eric Xiao



Club Advisor:
Mr. Snedden



Code: **first**

<https://tinyurl.com/dhsmathattendance>



Meetings every other Thursday in J210

What Do We Do in Math Club?

The background of the slide is a solid blue color. Overlaid on this background are several wavy, horizontal lines composed of small, dark blue dots. These lines create a sense of motion and depth, starting from the left edge and extending towards the right, with some lines appearing more densely packed than others.

What We'll Be Doing

- Explore math not typically taught in high schools
 - Some topics: complex analysis, number theory, discrete math/combinatorics (CS)
 - Lectures! by Mr. Snedden
- AMCs! — and other math competitions
 - competition prep
- future use of math knowledge



AMCs — American Mathematics Competition Series

AMC 10/12



- AMC 10/12
 - AMC 12 — available for all students up to 12th grade
 - AMC 10 — only students 10th and below
 - offers two exam versions (A & B) on Nov. 10, 16, 2022
 - students can take both versions AND can mix types
- 25 questions, 75 min.
 - 6 pts — correct
 - 0 pts — incorrect
 - 1.5 pts — blank
- both serve as qualifying rounds for the AIME

AMC Comp. Series



- AMC 10/12
- AIME
 - American Invitational Mathematics Exam
 - top ~5% of the AMC 10 scorers and top ~2.5% from the AMC 12
 - 15 short answer (0-999), 3 hours
- USA (Junior) Math Olympiad
 - $\text{AMC score} + 10 * \text{AIME Score} = \text{INDEX}$
 - top ~250 for each olympiad qualify
 - 6 problems, 9 hours, proof-based

AMC Comp. Series



- MOP — Math Olympiad Summer Program
 - arguably the most prestigious and most competitive summer program in the U.S.
- International Math Olympiad (IMO)
 - the following year, top 4 students from the MOSP are invited to represent the U.S at the IMO
 - 174 countries (“member states”)

Why Care?



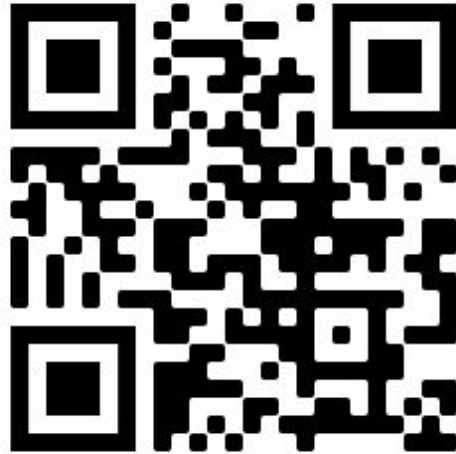
Problem-Solving Skills

- problem-solving skills are transferable
- pattern recognition
- build mathematical intuition to apply to other real-world problems
- ... college apps

Colleges

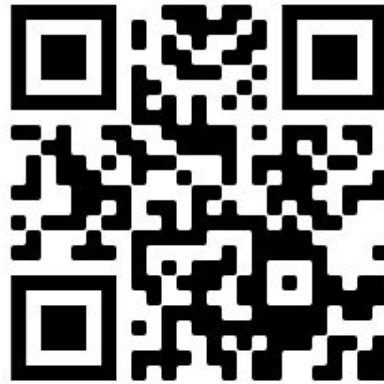
- Top STEM colleges explicitly ask for your AMC/AIME scores
- optional, but highly recommended
- MIT, Caltech, Carnegie Mellon, Ivies, ...

AMC Registration



<https://tinyurl.com/dhsamc2022>

Discord



discord.gg/jcA6mN4b2f