

Math Maniacs Summer 2026

Grades: 5–7

Dates: August 3-7

Time: 3-6 pm CST

Day 1 – Basic Foundations

1. Icebreaker - name, age, where you're from, if you were an icecream flavor what would you be
2. Join google classroom
3. Go over lesson plans/schedule
4. All about the AMC 8
5. Do a gimkit to see where everyone is
6. Go over commonly missed questions on gimkit
7. Basic algebra and systems of equations
 - a. factoring
 - b. Word problems
8. BREAK
9. Basic probability ideas
 - a. Word problems
10. Magic math trick
11. Basic geometric shapes and properties
 - a. Word problems

Day 2 – Algebra/Number Theory

1. Review homework
2. Warm up questions
3. More complex factoring
4. More complex systems of equations
5. Apply to amc questions
6. Mental math strategies
7. Rate vs time
8. Checking solutions
9. Creating equations from a problem
10. BREAK
 - a. Gimkit, zetamac, or gartic phone math version
11. Prime factorization
12. Lcm / gcd
13. Divisibility tricks
14. Number of factors
15. Remainders

Day 3 – Probability

1. Review homework
2. Warm up questions
3. Permutations vs combinations
4. Factorial
 - a. How to use factorial
5. ‘Choose’
6. Counting with restrictions
7. BREAK
 - a. Gimkit, zetamac, or gartic phone math version
8. Stars and bars
 - a. Video
9. Pigeonhole principle
10. Application questions

Day 4 – Geometry

1. Review homework
2. Warm up questions
3. Similar triangles
 - a. Lots of application
4. Pythagorean theorem
5. Circle theorems
 - a. Power of a point
6. Relationships between triangles and circles
7. BREAK
 - a. Gimkit, zetamac, or gartic phone math version
8. Coordinate geometry
9. Volume
10. Tons of practice

Day 5 – Mock Test and fun!

1. Review homework
2. Review stuff learned on first few days
3. Take mock amc 8!
4. Review commonly missed questions
5. BREAK
6. Gimkit!!
7. Gartic phone math version