Sam Thiel

Mathematician and Musician. *sthiel@oberlin.edu*. *https://stolenquotient2.github.io/*

EDUCATION:

Oberlin College, *Oberlin, OH.* Diploma expected June 2026.
Declared Majors in Mathematics and Musical Studies. Honors Candidate in Mathematics.

Deerfield Academy, *Deerfield, MA.* Diploma received May 2022.

RELEVANT COURSEWORK (*Mathematics*):

- Real Analysis (MATH 358)
- Topology (MATH 353)
- Probability (MATH 355)
- Harmonic Analysis (MATH 357)
- Group Theory (MATH 327)
- Foundations of Analysis (MATH 301)
- Computational Algebra (MATH 328)
- Linear Algebra (MATH 232)

RELEVANT COURSEWORK (*Musical Studies/Other*):

- Mathematical Approaches to Music Theory (MUTH 347)
- Introduction to Computer Science (CSCI 150)

PROFESSIONAL EXPERIENCE:

Oberlin College and Conservatory, *Oberlin, OH.*

Research Assistant (with Chris Marx) (Aug. 2024—Present)

- Met weekly with Prof. Marx to work on his textbook on the intersection between Harmonic Analysis and Music.
- Composed in-text figures to help students visualize novel tools and results
- Developed online resources to enhance student learning by providing hands-on examples
- Designed end-of-chapter problems to provide essential practice in the textbook material.
- Proofread sections of the textbook for errors and clarity.

Teaching Assistant (For Susan Colley, Alexander Wilson) (Fall Semester 2024—Spring Semester 2025)

- Ran weekly 90-minute problem sessions each week for students taking Group Theory (MATH327).
- Collected, graded, and provided feedback on weekly homework assignments.
- Analyzed common mistakes and difficulties and maintained communication with the professor about these issues.
- Developed individual rapport with students in order to build a safe and supportive learning environment.

Homework Grader (For Susan Colley) (Fall Semester 2022—Spring Semester 2024)

- Collected and graded weekly homework for students taking Linear Algebra (MATH 232, proof-based) and Multivariable Calculus (MATH231, non-proof based).
- Provided insightful comments and feedback to promote student learning.
- Analyzed common mistakes among students and relayed information back to the professor.

Presentations:

- Oberlin Undergraduate Research Symposium, Apr. 2025. *Costello Divisibility: Explorations of a Comedic Division Algorithm*

Publications:

- Costello Divisibility: Explorations of a Comedic Division Algorithm (with Alexander N. Wilson). *The College Mathematics Journal, submitted*.

Skills & Software:

- Microsoft Office Suite
- Google Suite
- LaTeX/TeXShop
- Python
- GitHub
- Jira
- Godot/GDScript
- Affinity Designer
- Sibelius
- MuseScore
- Logic Pro
- Ableton Live
- FL Studio
- Discord