# 9th Grade Math: Breakthrough New York Summer 2024 Syllabus

## **Instructors Information**

- Ms. Vivian (she/her), vivian.mei@btny.org
- Mr. Matthew (he/him), matthew.li@btny.org

## **Course Description**

This course will prepare students for mathematics in their upcoming academic year and high school, specifically focusing on foundations of algebra and functions. This would include topics such as identifying functions, graphing, domain and range, and inverse functions.

## **Course Objectives**

- Identifying and interpreting functions
- Describing and categorizing functions by their equations
- Describing and categorizing functions by their graphical representation
- Creating and interpreting graphs, understanding domain and range
- Understanding piecewise, absolute value, and inverse functions and their uses

#### **About Your Instructors**

#### Ms. Vivian Mei

Hey everyone, I am Ms. Vivian. I am excited to meet and teach y'all! I am from Queens, New York and I study applied mathematics and statistics at Stony Brook University. (Go seawolves!)

I enjoy teaching and helping students better understand math concepts and gain skills! I plan on pursuing a career in education after I graduate, so I look forward to learning from you as much as you learn from us.

In my free time, I love to draw, read manga, and explore the city with my friends. I also love a good matcha place – if you have any recommendations, I would love to hear it! I also enjoy collecting cute things (specifically Sanrio) and blind boxes. :)

#### Mr. Matthew Li

What's up guys, I'm Mr. Matthew. I just graduated from a high school in Dallas, Texas, and next year I'll be studying math at Stanford University near San Francisco.

I really like teaching, and it's something I always try to find time to do. My hobbies are reading, playing the guitar, skating, and taking poorly calculated risks.

Many benefits of math include maximizing profits in the gym, bank account, and of course, the classroom. Feel free to shoot me any questions about the class. Excited to meet and work with all of y'all as we breeze through this absolutely tremendous! subject.

# **Academic Integrity**

Academic integrity in math is important to uphold, so please don't use any form of AI or other online resources that complete your work for you. For your homework, feel free to collaborate with your classmates only, but don't copy their assignments! Remember you need to show all of your work on your assignments!

# **Math Help**

Some online resources you can use if you feel stuck or want to learn more:

- Khan Academy
- MathHelp.com
- YouTube there are many math channels such as Professor Leonard, bprp math basics, PatrickJMT, AND MANY MORE!
- Art of Problem Solving