

# The Magic of Mathematics Virtual Camp July 15, 2024 to July 19, 2024 1 p.m. to 3 p.m. EST

## **Daily Schedule**

12:45PM - 1:00PM	Camp Virtual Room Opens
1:00PM - 1:05PM	Attendance
1:05PM - 2:00PM	Activity Time
2:00PM - 2:05PM	Break
2:05AM - 3:00PM	Activity Time
3:00PM - 3:05PM	Camp Virtual Room Closes





### Camp Agenda

#### Session #1: Algebra Architects

#### Jul 15, 2024 | 1pm - 3pm EST

In this session, participants will be going through algebra skills, and using them to create a city. Students will learn how to solve algebraic equations and utilize the roots to exercise plotting. The students will also be taught principles such as substitution and elimination with linear equations.

#### Session #2: Quadratic Quest

Jul 16, 2024 | 1pm - 3pm EST

In this session, students will continue with the city design with an emphasis on quadratics. Students will learn to solve quadratic equations and display curves on a digital graph paper. Quadratics will be used in the context of real-life scenarios which can be better understood with the use of math.

#### Session #3: Rapid Routes

Jul 17, 2024 | 1pm - 3pm EST

In this session, students will be introduced to the basics of calculus - derivatives. We will learn what a derivative is, and how to perform the mathematical operation on a linear or quadratic equation.

#### Session #4: Derivatives and Applications

#### Jul 18, 2024 | 1pm - 3pm EST

In this session, skills with derivatives will be built on - with less of an emphasis on the mathematical skills, and instead on using them to solve real world problems connecting to how linear and quadratic equations change.

#### Session #5: Resource Riddles

Jul 19, 2024 | 1pm - 3pm EST

In this session, participants will be introduced to another calculus topic - the integral. This powerful tool allows us to understand how a rate of change in a mathematical equation affects the total amount, and using these skills to understand how resources can be managed more efficiently.