

# **Course Description**

Middle School Mathematics 1 is designed to engage students at every turn. Students have opportunities to demonstrate their knowledge of number manipulation by applying it to real-world scenarios. The course is packed with engaging activities that reinforce and let students practice the skills they learn throughout the course. Interactive learning and innovative videos keep the students engaged throughout.

The instruction in this course focuses on four critical areas: (1) connecting ratio and rate to whole-number multiplication and division, and using concepts of ratio and rate to solve problems; (2) completing an understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing an understanding of statistical thinking. The instruction in the advanced course focuses on two extra critical areas: (1) developing understanding of and applying proportional relationships; and (2) developing understanding of operations with rational numbers and working with expressions and linear equations.

This is a yearlong course consisting of 8 units.

### **Course Overview**

#### Semester 1

- Decimals and Fractions
- Ratios and Rate Reasoning
- Rational Numbers
- The Coordinate Plane

Semester 2

- Area
- Expressions
- Equations
- Understanding Data

#### **Required Course Materials**

Please access the list of course materials from the OC Online book ordering system and order your materials as soon as possible. Oftentimes, course materials are on back order and you may experience a delay in receiving them, causing students to fall behind in their online coursework. When ordering used or rented materials, be careful that online access codes are also current.

## **Methods of Evaluation**

Students will demonstrate mastery through the following formative and summative assessments:

- 40% Assignments
- 10% Participation (Discussion Posts, Synchronous Sessions)
- 10% Quizzes
- 25% Final Exam
- 15% Unit Tests