

## **Middle School Algebra**

### **Winter 2021 – Session 3**

**Instructor: Lyra Porcasi**

## **Syllabus**

*Class objectives:* The Algebra course is designed to follow the CCSS for 8<sup>th</sup> grade and is an equivalent course for 8<sup>th</sup> grade math. In session 3, students will learn how to calculate distance, perimeter, and area on a coordinate plane, and calculate volume. They will also learn about functions and graphing, including slope, domain, range, and writing the equation of a line.

*Topics covered:*

1. Review of Pythagorean Theorem
2. Review of Distance Formula
3. Area and perimeter in the coordinate plane
4. Volume
5. Define and compare functions, domain, range
6. Evaluate functions, function notation, average rate of change (slope)
7. Graphing and describing characteristics of a line
8. Writing the equation of a line

*Special Projects:* Linear Battle Field, and Area Dissection

*Required materials for class every day:* Single subject (1”) 3-ring notebook, college-ruled lined paper, graph paper, pencil w/ eraser, scientific calculator (suggested TI-30), ruler, “cheat sheets” given in session 1.