# Pre-Algebra Foundations <br> Session 4 <br> Instructor: Laura Erlig 

Objective: The Pre-Algebra course is designed to prepare students with the foundational math skills necessary for Algebra. The class uses the Everyday Mathematics text, games, as well as Khan Academy. In Session 4, students will learn about Variables and Algebraic Relationships and the expressions to calculate them. They will also review and practice foundational math skills.

## Concepts covered in Session 4: Unit 8 (Ratios, Expressions, and Equations)

- Using Area and ratios
- Interpreting the scale drawing to find new dimensions from small to large
- Using a coordinate grid, students will use scale drawing to find new dimensions from large to small
- Use proportional reasoning to compare the sizes of the planets to Earth
- Find population density for a variety of areas
- Solve equations to balance mobiles and make their own mobiles
- Generate patterns and generalize with algebraic expressions
- Anthropometry - use one body measure to predict another
- Use a spreadsheet to plan a road trip with given cost and budget


## Expectations:

- Participate in class, including asking for help or asking questions in class.
- Do your best to achieve personal goals.
- Complete the homework assigned.
- Watch the assigned video/s and take notes in a spiral notebook.
- Check on Google Classroom for assignments and progress of completed work.


## Tips:

- Use your time wisely in class and at home. If you are distracted, the work will take 2 or 3 times longer.
- Check Google Classroom daily.
- Display work to be able see the process to come up with the answer
- Practice things you do not understand and ask for help when needed!
- Know your multiplication tables by memory and how to do long division with ease


## Rubric:

- $50 \%$ Assessments (include quizzes, tests, and projects weighted by the number of points assigned)
- $25 \%$ Independent practice (include homework and classwork)
- 20\% Participation (actively asking questions, answering questions, and being productive in class)
- $5 \%$ Attendance (being on time and prepared for class)

