

BRIDGE TO FALL: ALGEBRA I FOR DIVERSE LEARNERS

SYLLABUS

COURSE INFORMATION

Teacher: Ms. Bradley

Live Class Times: Mondays, Wednesdays and Friday, 12-1pm (EST)

Offline Check-In times: Daily from 4-5pm (EST)

Email Address: tina.n.bradley@gmail.com

COURSE DESCRIPTION

In this course, students will review the fundamental knowledge and skills in Algebra I. This will include linear equations and inequalities as well as linear, exponential, and quadratic functions. Students will engage in a problem-solving activity during each class session, applying Algebra concepts to real life situations using a variety of online tools and applications. There will also be formative assessments, with weekly progress reports shared with parents. After completing this unit students will be able to represent each function in a table, as an equation, and graphically. Students will also be able to evaluate, solve, and compare functions.

COURSE OBJECTIVES

Students will be able to:

- Solve linear equations and inequalities in one and two variables, including equations with coefficients represented by letters
- Construct a function to model a linear relationship between two quantities
- Determine and interpret the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph
- Create equations and inequalities in one variable and use them to solve problems
- Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales
- Using function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context
- Graph linear, exponential and quadratic functions and show intercepts, maxima, and minima

REQUIRED STUDENT RESOURCES

- Desktop/laptop required to access Google Classroom for all live sessions and assignments
- Internet access required for various online tools and applications

COURSE SCHEDULE/OUTLINE

Week 1	Topic	Technology Used
Session 1	Interpreting, solving and evaluating equations with numbers and letters to represent quantities in a solution	Google Classroom Nearpod Flipgrid Google forms
Session 2	Creating and evaluating equations with one to two variables	Google Classroom Nearpod Flipgrid Google forms
Session 3	Connecting equations to graphs	Google Classroom Mathalicious Flipgrid

		Google forms
Week 2	Topic	Technology Used
Session 4	Defining and interpreting linear functions	Google Classroom Nearpod Flipgrid Google forms
Session 5	Evaluating linear functions using tables and graphs	Google Classroom Desmos Flipgrid Google forms
Session 6	Defining and interpreting exponential functions	Google Classroom Nearpod Flipgrid Google forms
Week 3	Topic	Technology Used
Session 7	Evaluating exponential functions using tables and graphs	Google Classroom Desmos Flipgrid Google forms
Session 8	Defining and interpreting quadratic functions	Google Classroom Nearpod Flipgrid
Session 9	Evaluating quadratic functions using tables and graphs	Google Classroom Desmos Flipgrid Google forms