***Guide to Foundations of Algebra & Algebra 1***

***With Coach Watson and Coach Estes***

Parents and Students,

Welcome to Foundations of Algebra for the Fall 2017 semester and Algebra 1 for the Spring 2018 semester! We will be your child’s math teachers for the entire year. We currently have your child listed on our classroom roster and are looking forward to teaching and getting to know him/her. In this guide, you will find some helpful pieces of information about expectations for the course, our teaching style, and materials students need.

**Foundations of Algebra/Algebra 1 Sequence (FoA/Alg1)**

This is the second year of Allatoona offering the Foundations of Algebra/Algebra 1 sequence. Students will take Foundations in the fall and Algebra 1 in the spring. The focus of the Foundations course is to strengthen a student’s understanding of essential middle school concepts required for Algebra 1. We will spend the first half of Foundations focusing on fractions, decimals, integers, proportions, algebraic expressions, and number sense. The last half of the Foundations course will focus on solving equations and working with linear functions (which are the first two units of the traditional Algebra 1 course). In the spring, your child will complete Algebra 1, where we will continue building off equations and linear functions, then work our way into quadratic and exponential functions, and wrap up the year with some data analysis and statistics. There will be a fall semester final exam for the Foundations course and a spring EOC for the Algebra 1 course. Upon successful passing of both courses, your child will receive two math credits (they need four to graduate).

**Foundations of Algebra/Algebra Unit Outline**

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| **Foundations of Algebra (Fall)** | **Algebra 1 (Spring)** |
| Unit 1: Number Sense and Quantity | Unit 7: Polynomial & Quadratic Expressions |
| Unit 2: Proportional Reasoning & Dimensional Analysis | Unit 8: Quadratic Functions |
| Unit 3: Arithmetic to Algebra | Unit 9: Quadratic Equations |
| Unit 4: Equations and Inequalities | Unit 10: Exponential Functions |
| Unit 5: Linear Functions | Unit 11: Comparing Linear, Quadratic, & Exponential Functions |
| Unit 6: Systems of Equations | Unit 12: Describing Data |

**Communication**

There are several forms of communication that help maintain a partnership between parents and teachers so we can help a student achieve success:

* *Synergy* – We highly encourage parents to check Synergy 1-2 times a week to track their child’s progress. If Synergy is checked on a regular basis, parents will always be informed of their child’s progress in the course. If you are unsure how to access Synergy, please contact the counseling office for log-in information.
* *Email* – This is the best way to contact us for specific information regarding your child. Emails are typically answered within 24 hours.
* *Blog* – Important information, lesson notes, homework worksheets, and assessment dates can be found here. The blog can be accessed by going to [watsgoingonmath.weebly.com](file:///C%3A%5CUsers%5Cwcs16851%5CAppData%5CLocal%5CMicrosoft%5CWindows%5CINetCache%5CContent.Outlook%5CVK8M0F9C%5Cwatsgoingonmath.weebly.com)
* *Remind* - In addition to the blog, we will be using Remind to pass along important information, reminders, and announcements to parents/guardians and students. Remind is an internet based program that allows us to send you information via text. Parents and students are also able to reply back to any messages sent out.  You will not be able to see our phone numbers and we will not be able to see yours.   Both parents/guardians & students are welcome to join their class distribution list by following the instructions attached at the end of this letter. **Sign up by texting @foawatson to 81010**
* *Conferences* – All parent teacher conferences must be set up through the counseling department. All efforts to communicate via email with the teacher should be made before submitting a request for a conference.

**Our Teaching Style**

Our goal as teachers is to help students become self-sufficient independent learners who know how to use their resources. We define “resources” as their notes, calculators, classmates, online websites and videos, and lastly, the teachers. We also believe in having students “teach” and collaborate with their peers; we want students to be able to explain and talk the math with their classmates as they process and understand the material.

In a typical classroom day, the lesson is a combination of teacher directed instruction, guided instruction, independent thinking, and collaborative conversation and activities. After a lesson, students have anywhere from 15 to 30 minutes of practice time where they can work with their classmates or independently, check answers as they work, get one on one help, and ask additional questions. Answers to the practice are posted on the board so students can check their progress.

Additionally, a question we hear from students frequently at the beginning of a semester during practice time is “What do I do?” or “How do I solve this?”. Please be aware that after a lesson, we will not just tell students how to solve the problem. In the event a student wants us to tell them how to solve a problem, we will use one of the following strategies:

* Questioning – Ask the student a series of questions to help guide their thinking
* Review a Similar Problem – Using their notes, we will review a problem we covered in class to see if they can apply what we did in the lesson to their practice problem
* Utilize a Classmate – We may ask a student to talk with a classmate first (typically a student who had the same question and was able to successfully complete the problem)

By the end of the semester, we rarely have students ask us to tell them how to solve a problem. They have learned how to use their resources!

Lastly, we are firm believers of practice (just like a sport). Students are given practice assignments after every lesson. The purpose of practice assignments is to give students the opportunity to practice what they learned, discover their strengths and weaknesses with the material, ask questions, and improve their math skills. They are expected to complete these, even though they are not graded. If students do not complete practice assignments, they are more than likely not going to do well on quizzes and tests (which are graded).

**Tutoring Times**

Sometimes, additional instruction is necessary to help a student understand the material, catch up from being absent, make up a test or quiz, or ask questions. The tutoring times offered by individual teachers are directly for Foundations students. The math department tutoring is available for any students struggling in math, so a student may be in a session with students from other courses, but will still receive individual instruction. This is our current schedule for tutoring, but additional responsibilities may arise throughout the semester, causing small changes to the schedule (changes will be communicated via email and Remind)

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| **Teacher** | **Time** | **Location** |
| Coach Watson | Tuesday Mornings7:40 – 8:10Thursday Mornings7:40 – 8: 10 | Room 1208 |

Please be aware situations may arise periodically throughout the semester that may require a tutoring session to be cancelled. Additionally, on test days, we strive to provide a tutoring session in the morning (not always a guarantee due to faculty or teacher meetings).

Our expectations for attending tutoring are as follows:

* Students are using their classroom time appropriately (paying attention, asking questions, staying on task, etc).
* Students bring specific questions, problems, etc. to the session. Their notes from the lesson should be complete as well (regardless if they were present or absent as lesson notes are posted on the blog).
* Students arrive on time to the tutoring sessions.

*If students are wasting their time in class, they will not be allowed to waste our time outside of class.*

**Absences**

In the event that a student is absent, they should always check the blog for lesson notes and homework. Upon return to school, they should check the green homework bin for anything that was passed out during class. It is their responsibility to get all notes and make up work completed prior to a quiz or test. The following expectations for absences regarding test and quiz days will be enforced:

* If a student is absent on the day of a review, they are still required to take the quiz/test as scheduled as no new material will have be learned.
* If a student has missed instruction, but is present for review day, they will be expected to take the quiz/test as scheduled.
* If a student is absent on the day of a quiz/test, they will be expected to take the quiz/test on the day they return to school either in class or before/after school.
* If a student is present for a quiz, they are expected to take it, regardless if they missed any prior instruction. Quizzes are important pieces of feedback for both us and students. Poor quiz scores can be replaced by higher test scores.

**Recommended Calculators**

To ensure a smooth transition from math course to math course at AHS, the AHS Math Department is **highly recommending** a TI-84 Plus or TI-84 Plus C or CE Graphing Calculator for all math courses for the 2016-2017 school year and beyond. We will be using a TI-84 Plus for all instructional content taught in the course. The online End of Course Test (EOC’s) will utilize a TI-84 interface as well. The TI-84 Plus Graphing Calculators can also be used for almost ALL college level math classes.

The differences between the TI-83 and TI-84 calculators are the TI-84 calculators have the Mathprint feature (write numbers as fractions and radicals instead of only decimals), more memory, faster processing speeds, and an USB port and connector cord. You may be able to find TI-83 Graphing Calculators for significantly cheaper than TI-84’s on Amazon or eBay if the cost of a TI-84 Plus is not feasible for your family at this time.

The TI-36 Pro is a great calculator for calculations, especially in the first half of the semester, however it does not have the ability to graph functions (very important for Algebra 1, Algebra 2, and Pre-Calculus). This is the one of the biggest reasons why we do not recommend the TI-36 Pro anymore. The TI-30 IIS or similar (middle school calculator) is NOT recommended for any high school level math course.

Please email us if you have any questions regarding calculator recommendations.

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| **TI-84 Plus C or CE Graphing Calculator****(#1 choice)** | **TI-84 Plus Graphing Calculator****(#2 choice)** | **TI-83 Plus Graphing Calculator****(#3 choice)** | **TI-36 Pro Scientific Calculator** | **TI-30 IIS Scientific Calculator** |
| $89.99 | $96.99 | $87.99 | $19.99 |  |
| *\*Costs are based off Target website as of July 23rd, 2017. Office Max/Depot, Walmart, or Staples prices may differ.\** |
| Rechargeable Battery (electronic charger) | Battery Operated | Battery Operated | Solar Panel Operated | Solar Panel Operated |
| Highly Recommended(EOC Calculator) | Highly Recommended(EOC Calculator) | Acceptable | Not Recommended (No Graphing Feature) | Not Recommended |
| For more calculator comparisons, please visit: ***https://education.ti.com/en/us/product-resources/graphing\_course\_comparision*** |

**Apps Students Will Need:**

The following apps should be downloaded (all free) to a student’s phone as they will be utilized throughout the semester:

 Remind Desmos Kahoot QR Reader



**Classroom Donations**

Throughout the semester our classroom will need tissues, markers, hand sanitizer, and Lysol disinfectant wipes. We strive to keep our classroom stocked with these supplies, but with 90 students we see a day, these supplies run out quickly. We greatly appreciate any supplies you would be willing to donate for our classroom.

**Materials Needed (for each semester)**

* Two 1.5 to 2 inch Three Ring Binders
* Binder Dividers
* Pencils (mechanical or regular)
* Colored Pencils (at least 3-4 colors)
* Lined Paper
* Skinny Dry Erase Markers
* Markers or Highlighters (at least 3-4 colors)
* Graphing Calculator (see previous page)

*We look forward to a great semester with your student!*

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| *Coach Watson*  | *Coach Estes* |
| *Math Teacher*  | *Math Co-Teacher*  |
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