## Algebra I Honors Benjamin Ogles - <u>bogles@mauryk12.org</u>

Algebra I Honors emphasizes linear and quadratic expressions, equations, and functions. This course also introduces students to polynomial and exponential functions with domains in the integers. Students explore the structures of and interpret functions and other mathematical models. Students build upon previous knowledge of equations and inequalities to reason, solve, and represent equations and inequalities numerically and graphically.

The class will be structured in two parts, lectures to explain new concepts and homework days to work confusing problems from the practice. This course is intensive. You will have to work many, many problems to master the syllabus. You are expected to attempt all the problems and to ask questions when you cannot figure out the solution.

## Grading

I will give homework almost daily, but it will be graded solely in terms of effort. If you attempt every problem, you will receive full credit. Homework will be accepted for one week past its due date for partial credit. At the end of each section, we will have a quiz to consolidate the topics that we have covered. The quizzes will test for mastery of particular skills. Therefore, some components will be all-or-nothing. If you can solve the problem, you have demonstrated mastery and will receive a 100. If you cannot solve it, you will receive a 0 and must retake the test until you demonstrate the skill.

Speaking in class – 10%

Homework – 25%

Quizzes - 50%

Midterm/Final - 15%

The midterm will be given before Christmas, and it will cover all material learned in the first semester. Maury County School Board Policy requires everyone to take this examination. The final exam will be given at the end of the year, and it will cover material learned in the course. Exemptions are allowed if you meet the standards for grades and absences.

To maintain the integrity of all grades awarded, both the students who cheat and/or copy the work of another student, AND the student who provided the work to copy from, will receive no credit for the work. Likewise, students who copy their answers from the internet, app, or other format will receive no credit.

Rules

- At the beginning of class, you will place your phone in the numbered pockets near my desk. This task should be completed by the time the bell rings. You will not be counted present until this task is completed. Students wishing to charge their phones during class should invest in a portable phone charger that can be placed in the wall pocket with their phone.
- You are not allowed to eat or drink anything besides water. If you still bring food, it means that you are volunteering to help clean the room at the end of class.
- Problems such as talking during the lesson, not participating when called on, or disrupting class will result in penalties. First, you will be given a warning. Second, I will contact your parents. Third, I will contact the principals.

I have read and understood the syllabus for Algebra I Honors. I agree to participate in this course to the best of my ability.

Student Name Printed

Parent Signature

Student Signature

Date

Date

## **Tennessee Algebra 1 Standards**

The major work of Algebra I is from the following domains and clusters: Interpreting Categorical and Quantitative Data Seeing Structure in Expressions Interpreting the structure of expressions. A1.A.SSE.A.1; A1.A.SSE.A.2 Write expressions in equivalent forms to solve problems. A1.A.SSE.B.3 Arithmetic with Polynomials and Rational Expressions Perform arithmetic operations on polynomials. A1.A.APR.A.1 **Creating Equations** Create equations that describe numbers or relationships. A1.A.CED.A.1, A1.A.CED.A.2, A1.A.CED.A.3, A1.A.CED.A.4 Reasoning with Equations and Inequalities Understand solving equations as a process of reasoning and explain the reasoning. A1.A.REI.A.1 Solve equations and inequalities in one variable. A1.A.REI.B.2; A1.A.REI.B3 Represent and solve equations and inequalities graphically. A1.A.REI.D.5; A1.A.REI.D.6; A1.A.REI.D.7 **Interpreting Functions** Understand the concept of a function and use function notation. A1.F.IF.A.1, A1.F.IF.A.2 Interpret functions that arise in applications in terms of the context. A1.F.IF.B.3, A1.F.IF.B.4, A1.F.IF.B.5 Interpreting Categorical and Quantitative Data Interpret linear models. A1.S.ID.C.5; A1.S.ID.C.6; A1.S.ID.C.7