

# Algebra IA

Morton High School



## Algebra IA at a Glance

Algebra is one of the fundamental branches of mathematics. A good background in algebra is needed for all other branches of mathematics and many other science-related courses such as chemistry, physics, electricity, and engineering. Algebra I is broken into four units: equations in one variable; equations in two variables; exponential and quadratic functions; and radicals and rational functions. Technology such as the TI-Nspire and/or DESMOS will be used to enhance student learning. Does not currently meet math requirements for NCAA Clearinghouse.

### Topics Covered:

Expressions, Equations, and Functions, Properties of Real Numbers, Solving Linear Equations, Graphing Linear Equations and Functions, Writing Linear Equations, Semester, Solving and Graphing Linear Inequalities, Systems of Equations and Inequalities, Exponents and Exponential Functions, Polynomials and Factoring, Quadratic Equations and Functions, Radicals and Geometry Connections (as time allows)

### Textbook:

*Algebra 1* (Larson, Boswell, Kanold, Stiff. Holt McDougal, 2011)

## Available Resources

All blank notes, completed notes, homework, answers to homework, blank reviews and answers to reviews are available on Schoology.

## Absences

Students need to take the initiative to find out what was missed in class after an absence. All completed written notes and homework solutions are available online each day. Please see the Schoology page before asking questions. See the top folder on the class page to find the most recent materials. Emails are much appreciated if there is confusion about notes, assignments or the student's absences leading up to an assessment.

## Mathematical Practice Standards

All Morton High School Students will:

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively
- Construct viable arguments and critique the reasoning of others
- Model with mathematics
- Use appropriate tools strategically
- Attend to precision
- Look for and make use of structure
- Look for and express regularity in repeated reasoning

## Grading Procedures

A Total points system is used to calculate grades. Grades are determined by dividing an individual student's accumulated point total by the total number of points possible.

Tests: .....	100 points maximum
Quizzes .....	50 points maximum
Skill Checks.....	Points vary
Homework .....	2 points

**Homework** will be posted in schoology for the most part. A majority of the assignments will be submitted to Schoology, not turned in physically. All homework is due at the time of the major assessment (Quiz/Test). Any homework not completed at that time will receive a 0.

**Skill Checks** are short quizzes that students may retake to earn points back. Skill checks can be retaken multiple times, but retakes for a particular unit must be redone by the time of the major assessment (Quiz/Test). Any skill check not retaken at that time will keep the highest score that has been achieved.

**Extra Credit** may be available at the teachers' discretion.. It will involve a project or selection of problems. As per department policy, the extra credit is worth 2% added to the semester grade percentage.

**Quizzes and Tests** are not able to be retaken.

## Academic Assistance

It is always a good idea to come in to get extra help. I will be available before and after school for assistance on any topic. ***Do not wait until you are behind to come and seek help.*** Ask early and often if you are struggling in a particular area, We will be more than willing to give extra assistance with any topic.

### Classroom Norms for Technology

Students will await further instructions given by the teacher. Students will listen for teacher's cue to close screen of iPad when whole-group attention is needed. Students will save/turn in work as needed and completely put away iPads when directed to do so. Students will visit only the websites listed in the activity, Schoology, or stated by the teacher. Any accidental deviation to an unauthorized website should be reported to the teacher immediately. Students will not eat or drink in the classroom when iPads are being utilized. **PHONES WILL BE SILENT AND PUT AWAY UNLESS GIVEN PERMISSION.** Failure to follow these norms may result in referral and/or confiscation.

### Supplies Needed

- Notebook or Charged iPad for notes and/or homework
- Pencils
- TI- 30XS Multiview or TI-Nspire CX or CX II

### Helpful Websites

PowerSchool is an excellent way to stay on top of your grades, tardies, and absences:

<https://ps1.morton709.org/public/home.html>

Schoology is where students AND parents access content, assignments, announcements and resources:

<http://mcusd709.schoology.com>

### Class Expectations

- Students are expected to be active participants in the learning process. This includes participating in class discussions, thinking about questions posed by the teacher and by classmates, construct viable mathematical arguments, and to help create an atmosphere that is conducive to learning.
- Students are expected to be responsible students. Responsible students are ready to learn throughout class by having required materials, being respectful of others and self, and being focused on mathematics. Students are also expected to complete assigned tasks (homework, class work, and other assignments), and seek extra help from the classroom teacher, as needed. Furthermore, responsible students will correct mistakes on homework and quizzes and will do their best to learn for understanding.
- Students are expected to show knowledge of all course objectives and apply that knowledge to real world situations. Furthermore, retention of material beyond the unit assessments in necessary. Students are expected to apply previously learned mathematics to new content to strengthen their mathematical understanding. Students will be expected to apply algebraic, numerical, and graphical reasoning to solve problems and explain their reasoning to others.

