

Algebra I

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Course Description:

Algebra I is the foundation for all high school mathematics courses. It is the bridge from the concrete to the abstract study of mathematics. Topics include simplifying expressions, evaluating and solving equations and inequalities, graphing linear functions and introductory geometry. Real world applications will be an integral part of the course.

Course Expectations:

It is my expectation that you will be committed to excellence in this course. To be successful you must spend both time and effort every day. You should expect to spend thirty minutes to one hour each night preparing for this course. There will be at least four projects that you will work on this year and those may require more time to complete.

While in class I expect that you will be focused and dedicated to your learning and that you will refrain from disruptive behavior. As your teacher I am committed to providing a safe space within which you can confidently explore mathematics. Additionally, I will always guide, support and encourage you to reach our goals.

Required Course Materials:

The following materials are required every day unless stated otherwise. Students can expect random checks of calculators and other materials that will count towards their grade.

- Three-ring Binder
- Five Tab Dividers
- Loose leaf paper
- Graph paper (when we are graphing)
- Pencils (no pens allowed)
- Protractor (when we are studying Geometry)
- Scientific Calculator (Recommended: TI 30Xa or TI 30X IIS)

Course Goals:

By the end of this course students will be able to:

- Represent algebraic concepts with physical materials, words, diagrams, tables, graphs, equations and inequalities and use appropriate technology.
- Use graphing technology and algebraic methods to analyze and predict linear relationships

- Formulate and solve linear and quadratic equations and linear inequalities algebraically and investigate nonlinear inequalities using graphs, tables, calculators and computers.
- Recognize and apply relationships within and among geometric figures.
- Maintain an organized notebook and binder
- Use appropriate mathematical vocabulary to express mathematical thinking

Evaluation

Students will be evaluated daily both formally and informally. This evaluation serves to monitor their understanding and performance in the course. Students will have Bell Ringers daily and they will be graded at the end of each week. Students also will have a quiz on the last day of each week to assess their mastery of the week's material (except when they have an exam). Projects will be an important part of this course. There will be at least one project of varying lengths each quarter. There will be at least one exam for each unit. Grades will be posted at least twice a month. This posting ensures that students always know their current grade and so that if there are any mistakes in their grade they can be remedied in a timely manner. If a student's grade falls below 75% a grade report will be sent home to be returned with a parent signature. Any student engaging in any form of communication with anyone besides the teacher during quizzes and exams will earn a zero.

Below is the grading criteria and scale that I will use.

Criteria:

Preparation – 5%

- Timeliness
- Participation
- Supplies

Skills Practice – 10%

- Homework
- Classwork

Skills Checks – 20%

- Do-Nows
- Exit Tickets

In-Class Assessments – 40%

- Tests
- Quizzes

Special Projects – 25%

- Group work
- Presentations

Scale:

| Grade | Min % | Max % |
|-------|-------|-------|
| A | 90 | 100 |
| B | 80 | 89 |
| C | 70 | 79 |
| D | 60 | 69 |
| F | 0 | 59 |

Class Rules and Routines:

I have four simple rules that will guide our activities in this class.

- Enter with peace.
 - Students are to enter the classroom quietly, calmly and ready to work. Any student that does not enter in this way will be given the opportunity to re-enter the room in the appropriate manner.
- Speak once acknowledged.
 - Students will raise their hands and will speak after they have been given permission to do so.
- Follow all directives.
 - Students will follow all directions immediately the first time they are given.
- Always behave honorably
 - Students will always behave in ways that are in line with the IWA and Code of Conduct. Students will not be disruptive, discourteous or engage in off-task behavior.

The following are the routines that will also be used to guide our activities in this class.

- Do-Nows
 - Every day students will have a Do-Now that will be completed on their weekly Do-Now sheet during the first five minutes of class.
 - Students will pick up a Do-Now sheet on the first day of the week and will turn it in on the last day of the week.
- Homework
 - Homework will be assigned regularly.
 - Students must have their homework assignment available during Do-Now time the day it is due.
 - There are two ways that homework may be graded. Students may self-grade an assignment, in which case a completion grade will be entered in the gradebook. Occasionally homework will be collected, graded for accuracy then returned.
- Discussions
 - A major part of this course will be class discussions.
 - Students are expected to contribute to all discussions by responding to questions asked, asking any relevant questions they have and by giving their complete attention to whoever is speaking.
- Missing Work
 - All students are expected to turn in assignments the day they are due.
 - Late homework assignments are only accepted one late and they receive half credit.
 - If a student has an excused absence, they must turn in assignments the day they return in order to receive full credit.
 - If a student misses an assessment, it must be taken the day they return during their lunch period or immediately following dismissal from school.
- Dismissal
 - I dismiss students, not the clock.
 - Students must place their exit slip in the appropriate box before leaving.
 - Before students leave, the room must be in order. All garbage must be placed in the trash and all class materials must be placed in their proper location within the room.

Topics to be covered and approximate schedule:

Our goal is to cover a chapter per month. The schedule will look something like this.

| Month | Topic |
|-----------|---------------------------------------|
| September | Equations |
| October | Linear Functions |
| November | Inequalities ad Absolute Value |
| December | Systems of Equations and Inequalities |
| January | Exponents and Exponential Functions |
| February | Polynomials and Factoring |
| March | Quadratic Functions |
| May | Rational Functions |
| June | Radical Functions |

Important!!! Detach this sheet and return it to Mama Iyabo by Friday September 16, 2016. It counts as a grade!!!

Parent/ Guardian Information Sheet

| | |
|---------------------------|--|
| Student Name | |
| Parent / Guardian Name(s) | |
| Address | |
| Home Phone | |
| Work Phone | |
| E-Mail | |
| Comments | |

Working Together

We have read all the information and agree with the above conditions. We also understand that these guidelines will assist in the successful completion of this class. Please sign this sheet and make sure your student returns this sheet by Friday September 16, 2016. **It will count as a grade.**

Parent/Guardian Name (Print)

Parent/Guardian Signature

Date:

Student Name (Print)

Student Signature

Date: