

Algebra Honors Syllabus

8th Grade * 2009 - 2010 * Miss Rosales



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Office Hours: By appointment at break, lunch, or after school.

Course Description: This course will introduce you to the abstract study of numbers and their relationship to one another. Pairs of numbers form graphic representations that bring us a powerful visualization of relations. You will develop a more sophisticated way of dealing with word problems by applying algebra. The skills you develop in Algebra are critical to the study of Geometry and Intermediate Algebra, as well as the quantitative aspects of any field that you may wish to pursue in the future

Required Materials:

- Glencoe Mathematics *Algebra 1*
- Spiral notebook for notes
- Loose-leaf college-ruled and graph paper for assignments
- Mechanical pencils and eraser
- Lead for mechanical pencils
- Red pen for corrections
- Ruler in inches and centimeters
- TI-83 or TI-83+ calculator

Benchmarks and Performance Standards:

After completing the course work for Algebra 1, students will:

- Solve linear equations and model real-world situations using linear equations.
- Solve systems of linear equations and model real-world situations using systems of linear equations.
- Solve linear inequalities and model real-world situations using linear inequalities.
- Solve simple absolute value equations and model real-world situations using absolute value equations. Know and use the properties of addition and multiplication (associative, commutative, identity, inverse, and distributive).
- Graph linear and simple exponential functions.
- Factor 2nd degree and simple 3rd degree polynomials and solve quadratic equations by factoring and completing the square.
- Understand the difference between relations and functions and find the domain and range of simple functions.
- Recognize different forms of linear equations (slope-intercept, point-slope, and standard form) and use those forms to find the equation of a line from 2 points or a point and a slope.
- Understand what slope is, how to find the slope of a line from a graph or an equation, and how slope relates to parallel and perpendicular lines.
- Understand basic experimental and theoretical probability.
- Know how to use the graphing capabilities and other functions of the TI-83 calculator.

Algebraic Concepts Covered in this Course

First Semester

- Ch. 1: The Language of Algebra
- Ch. 2: Real Numbers
- Ch. 3: Solving Linear Equations
- Ch. 4: Graphing Relations and Functions
- Ch. 5: Analyzing Linear Equations

Second Semester

- Ch. 6: Solving Linear Equations
- Ch. 7: Solving Systems of Linear Equations and Inequalities
- Ch. 8: Polynomials
- Ch. 9: Factoring
- Ch. 11 Radical Expressions and Triangles

CLASS INFORMATION AND EXPECTATIONS

Classroom Guidelines:

- Arrive to class on time
- Be prepared with supplies, homework
- Show respect for others
- Ask questions!
- Utilize resources and time efficiently and properly
- Listen carefully and follow directions
- Engage and work hard in class

Attendance: Every day is important! Your success in this course is directly related to how often you are present. If you are absent, it is your responsibility to get the work and notes that you missed. **If you are on campus during any portion of the school day, your homework for that day will be due and any scheduled quizzes or tests must be taken.** It is your responsibility to come see me if you arrive late to school or leave early and miss my class period.

If you miss the class the day before a test and return the day of the test, you will be expected to take the test as scheduled. If you have missed two or more days before a test and return the day of the test, come see me and we can make arrangements for you to take the test at a later date.

Grading: Students earn their math grades by actively participating in class and completing classwork, homework, quizzes, projects, participation, tests and semester exams. Students will be provided with a grade sheet to help them track their grade in the course throughout the semester.

Assignments that are submitted without a name will receive a grade of zero on the assignment.

Homework: Homework is assigned regularly. Homework is due at the beginning of class on the day after the assignment is given. Assignments will also be listed on the class web page. Missed homework cannot be made up (except for excused absences). See "**Late Work**" below for further information.

All regular homework assignments must include the proper heading as shown below, the assignment name, each problem written as in the text, sufficient work in a neat and organized way, as well as the student's proposed solution. Students are expected to check the odd-numbered problems in the back of the book before class. Use a red pen to show that the work has been corrected. There is additional help available on www.HotMath.com. The password is **xe63070de**.

| | | |
|---|--------------------|--------------|
| ○ | Name | Date |
| | Subject | Period/Grade |
| | Name of Assignment | |

Tests and Quizzes: Students will be notified in advance of quizzes and tests. All graded tests and quizzes will be sent home, reviewed by parents and signed before being returned to school. All tests and quizzes are to remain in students' classroom portfolios, but can be reviewed by students during break or by appointment. This year, students will regularly take timed drills to further develop their proficiency in core operations. The scores on these drills will be averaged and will contribute to the students' overall grade.

Late Work: Students will be given TWO late homework passes per quarter and may submit up to two late assignments with the homework pass within a week of the original due date to receive full credit. Late work slips may be used only for certain assignments made specific by the teacher. For each pass that is not used by the end of the semester, bonus points will be awarded.

Textbooks: The student textbook should be covered at all times. In order to protect the texts, all mathematics textbooks should be covered using heavy-duty paper (grocery bag). Adhesive book covers and fabric book covers are not permitted.

Students are not required to bring their textbooks to class each day. Students will be told in advance to bring their textbooks when necessary. The textbook, as well as many supplementary materials, is available online. The Online Student Edition (OSE) can be accessed by visiting www.algebra1.com, selecting the current text and logging in to the OSE. The User Name is **ALG1**, and the Password is **wRec84ehed**.

*** Note: Miss Rosales retains the right to make changes, additions, and deletions to the course **
expectations throughout the course of the year. Students will be made aware of any changes.*

Dear Students and Parents,

Please sign and return this portion of the page by **Friday, August 28, 2009**. If you have any questions, please feel free to contact me by email and I will promptly respond.

Thank you,
Miss Rosales

Miss Rosales,
We have read and understand the course syllabus for 8th Grade Algebra Honors.

Student Name (Print)

Student Signature

Date

Parent/Guardian Name (Print)

Parent/Guardian Signature

Date