Honors Algebra 1 Syllabus
7th Period: 12:12 – 12:57pm
2017 – 2018

Contact Info:
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Planning Periods: 8th (1:00 – 1:45pm) and 9th (1:48 – 2:34pm)
Website: www.rademakermath.com

Class Description: The main goal of this course is to provide students with a thorough and extensive study of algebraic concepts. This is a first year algebra course in which you will learn to reason symbolically. The key content involves writing, solving, and graphing linear and quadratic equations, including systems of two linear equations in two unknowns. Quadratic equations are solved by factoring, completing the square, graphically, or by application of the quadratic formula. The course also includes study of monomial and polynomial expressions, inequalities, exponents, functions, rational expressions, ratio, and proportion. Algebraic skills will be applied in a wide variety of problem-solving situations. Our focus is on both application and understanding.

Topics: Topics covered will include, but not limited to, the following:

1. Relationships between Quantities
    a. Expressions, Equations, and Functions
    b. Linear Equations
2. Linear Relationships
    a. Linear Functions
    b. Equations of Linear Functions
    c. Linear Inequalities
    d. Systems of Linear Equations and Inequalities
3. Exponential and Quadratic Relationships*
    a. Exponents and Exponential Functions
    b. Quadratic Expressions and Equations
    c. Quadratic Functions and Equations
4. Advanced Functions and Equations*
    a. Radical Functions
    b. Rational Functions and Equations
5. Data Analysis
    a. Statistics and probability

Common Core Standards

- Write expressions in equivalent forms to solve problems
- Perform arithmetic operations on polynomials
- Understand relationships between polynomial factors and zeros
- Create equations that describe relationships
- Understand solving equations as a process of reasoning
- Represent and solve equations/inequalities graphically

Expectations: Students are expected to try their best, follow instructions, be prepared and on time (5 tardies = 1 detention), and treat their peers with respect. Class will begin with a daily warm-up. Students are expected to take their seats and work on the warm-up on their own. Students should make sure to read the school handbook for school policies. No phones or other electronics are permitted during class. Students need to be responsible for their own learning and not impede on the learning of others.

Supplies: Each student will need to bring the following to class

- Covered textbook (Glencoe Algebra 1)
- 3-ring binder (1.5" or 2") with the following tabbed divider sections:
    - Warm-ups
    - Notes
    - Classwork
    - Homework
    - Tests/Quizzes

- Loose-leaf notebook paper or spiral notebook for math only
- Graph Paper
- Pencils WITH erasers
- Graphing Calculator (TI-83/TI-84 or higher)
- Dry Erase Marker

Assistance: I am available during my plan periods (8th and 9th), as well before and after school to assist students with any work or problems. If possible, please let me know ahead of time if you plan on stopping by. If you are having trouble, please come and see.

Assessments: A variety of assignments will be graded throughout the year, including the following (points are approximated):

- Tests (40 – 70 points)
- Quizzes (Pop and Planned) (5 – 30 points)
- Homework (3 – 10 points)
- Group work and Projects (15 – 40 points)
- Binder Check each semester (40 points)
- ALEKS – minutes and assignments (~20 points each week)

Grading: Your quarter grade will be determined based on the following weights and grades will be given based on the High School grading scale.

Weights:
- Quizzes: 35%
- Tests: 25%
- Homework: 25%
- Classwork/Participation: 10%
- Binder: 5%

Scale:
A 95-100%	B+ 89-91%	C+ 79-81%	D+ 69-71%	F <61.5%
A- 92-94%	B 85-88%	C 75-78%	D 65-68%	
	B- 82-84%	C- 72-74%	D- 62-64%	

Grade Point Average: Since this is a high school level class, we use the high school grading scale. It will count as the student's first high school credit and thus will count towards the student's high school GPA as a weighted honors course.

Extra Credit:

I do not typically give extra credit assignments. Though, students can earn extra credit points throughout class periods. For example, if a student finds a mistake during notes or homework check, they will earn an extra point.

Calculators: Obtaining a graphing calculator is required for the class. A TI-84+ is the recommended brand (TI-83 is also fine). It does not have to be new; older models still have the same capabilities. This calculator will be used in all subsequent math courses in high school, as well as on the ACT/SAT and college courses. I still use the same TI-83+ I received in 7th grade (15 years ago). Additionally, I do have some graphing calculators that students can borrow during the class period. However, there are not enough for an entire class. A graphing calculator is not necessary to complete this packet.

Test Retakes:

If a student does poorly on a test or quiz, I offer 1 option (up to 2 times per quarter)

1. Test Retakes: Students also can retake the entire test/quiz for full credit. The retake will not be the same as the original, but very similar. The retake score will replace the original score, even if it is worse. If a student wants to do a retake, they must schedule a time with me at least one day in advance.

   **Test Corrections may be assigned to the whole class depending on the overall scores. Corrections will be a separate grade and will not earn points back to the original assessment.

Homework: Homework will be assigned on almost a nightly basis and is due the following class period. Time may be provided at the end of each lesson to start that night's homework. Students are expected to complete each assignment and be prepared to ask questions or discuss problems. Homework provides an opportunity to practice and assess understanding of the lessons covered in class. Homework problems will often reappear on quizzes and tests. Students have one day to turn in a late assignment. Copying other people's homework does not help you learn, asking them to help is okay.

ALEKS: Students are required to complete 100 minutes each week on ALEKS.org. Time will be given during the blocked period to work, if all other work is completed. There will also be a weekly assignment (not counted towards the 100 minutes) that is due each Friday.

Make-up Work: Students with excused absences will be allowed however many days they missed to make up an assignment. If you miss a day that an assignment is due or a test/quiz day, you will be expected to turn in the assignment or make-up the test/quiz the day you return. It is the student's responsibility to check for missed work with the teacher. Homework will be written on the whiteboard by the door.

Resources: Grades will be available for students and parents on Progress Book. I try to update PB as much as I can. All grades will be entered no later than 1 week after the turn in date. Notes, worksheets, and additional resources will be available on the class website (www.rademakermath.com). Students also have the option to follow my twitter @MrRademaker, which will send reminders about upcoming assignments.

Website: The class page of the website will contain recordings of the lessons taught. It will also have recordings of additional examples and problems as needed. If a student misses a day, it is highly recommended that they go back and watch the video from the missed day and take notes as if they were in class.

Final Grade: Final grades will be determined by taking an average of each quarter's percent and the percent earned on the mid-term and final. Each quarter grades will account for 20% and the mid-term and finals will be 10% each.

Signature section and contract: You must return this page of the document to me within two days. This is your first homework assignment.

By signing and returning this page to me, you are saying that you have read this document and fully understand the materials in it.

Parent/Guardians:

I, _____ (please print), the parent/guardian of

_____ (please print) have read this entire document thoroughly with my student.

Parent/Guardian signature: _____

Parent/Guardian phone: _____

Parent/Guardian email: _____

Students:

I, _____ (please print), have read the document and promise to:

       1) Complete and turn in all of my homework on time
       2) Participate in class and ask questions when needed
       3) Put in an honest effort outside of school

Student Signature: _____

Questions?

_____

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