



ALGEBRA I HONORS
SYLLABUS AND CLASS SUMMARY
Mr. Ryan Bowman – Harrison High School
<http://bowmanhhs.weebly.com>

COURSE DESCRIPTION: *Algebra I* formalizes and extends the mathematics students learned in the middle grades. Five critical areas comprise Algebra I: Relations and Functions; Linear Equations and Inequalities; Quadratic and Nonlinear Equations; Systems of Equations and Inequalities; and Polynomial Expressions. The critical areas deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

NEEDED MATERIALS: You are to report to class on every scheduled class day with the following materials, unless notified beforehand:

- Notebook, used **only** for this class
- Pencil or blue/black ink pen
- Textbook (Algebra 1, Glencoe, Carter et al.)
- Netbook
- Scientific calculator

UNITS OF STUDY: This year of study of algebra has been broken into units of study. These units are as follows:

Fall Semester: <ul style="list-style-type: none">• Operations with Real Numbers (approx. 3 wks.)• Linear Equations & Inequalities with One Variable (3)• Linear Functions (3)• Graphing Linear Equations & Inequalities (2)• Writing Linear Equations & Inequalities (2)• Systems of Linear Equations & Inequalities (5)	Spring Semester: <ul style="list-style-type: none">• Polynomials (3)• Factoring (4.5)• Radical Expressions, Radical & Exponential Equations (3)• Quadratics (4.5)• ECA Review and Preparation (3)
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Before each unit of study begins, a unit outline will be posted on the class website. This outline will contain a tentative schedule for the unit and a list of learning objectives for the unit.

CLASS MEETINGS: The basic agenda for most class meetings will be as follows:

- Beginning of Class Quiz
- Student Q&A Time
- Individual Skill Practice
- Collaborative Group Work
- End-of-Meeting Summary

HOMEWORK: Mr. Bowman does not assign homework. The work you are responsible for outside of class is called **Pre-Class Work**. Your Pre-Class Work is designed to help introduce the basics of a topic to you. These activities are likely to include guided readings from the textbook, “mini-lecture” videos to watch, and practice exercises from the textbook or from another source.

BEGINNING OF CLASS QUIZ: There will be a very brief Beginning of Class Quiz at the very beginning of almost every class meeting. These are designed to allow the instructor to assess student understanding of the basics of the topic. You will start this quiz as soon as you arrive to class. These quizzes will be completed on your computer at <http://b.socrative.com/login/student>. Our Room Name for this site is **d8028454**.

STUDENT Q&A TIME: This is time set aside during the class meeting for students to ask questions about the material from the Pre-Class Work. The instructor will answer student questions and provide examples to illustrate his reasoning. (This is the part of the class meeting that reminds many students of what most other math classrooms look like.)

INDIVIDUAL SKILL PRACTICE: During this time, the instructor will have several example problems for students to try. Students will self-assess their ability. Students will practice these problems individually. Students are encouraged to share both their successes and their struggles with the instructor and with peers. The instructor will be available for some one-on-one and small group instruction during this time as well. This work will not be turned in, but is used to allow students to assess their understanding of the skill(s) and topic(s) at hand.

COLLABORATIVE GROUP WORK: Approximately half of each class meeting is dedicated to a set of problems for students to solve. Students are expected to work together in small groups to solve these problems. Students will hand-write their solutions to the problems. **This work is due no later than the beginning of the next class meeting.** These problems are intentionally very challenging and are designed at a level similar to that of the most challenging problems on the Indiana Algebra I End-of-Course Assessment.

Should student groups complete their work during this time, there will be additional extra problems available for the group to work on.

END-OF-MEETING SUMMARY: As a class, we will spend the last 5-10 minutes of the class meeting summarizing the meeting. This includes an “exit ticket,” a brief assessment. During this time, the instructor will also make your Pre-Class Work for the next class meeting available.

STUDENT GRADES: Student grades will be assigned according to the standard grading scale agreed upon by the EVSC and by Harrison High School. (See student handbook.)

ASSESSMENT: Per Harrison High School Mathematics Department policy, formative assessments (quizzes, in-class work, etc.) will account for 25% of your student grade. Summative assessments (unit exams) will account for 75% of your student grade.

You have the opportunity to retake every summative assessment, provided you complete and submit a plan-of-study first. Retakes must be completed no later than one week after the original exam date.

Each unit exam will be similar in style to the Indiana Algebra I ECA. Some problems will be multiple choice; some problems will ask for students to provide a free response or to explain reasoning. Quizzes and other formative assessments may be announced ahead of time or unannounced, at the discretion of the instructor.

Harrison PRIDE Classroom Expectations				
Preparedness	Respect	Integrity	Determination	Engagement
Be in the classroom when the bell rings with necessary materials. Be “Dressed for Success.”	Actively listen and follow directions. Create a classroom environment that allows you and others to learn.	Take responsibility to learn the material and show what you know. Do the right thing even if others are not.	Be attentive and productive. Use your time wisely.	Participate by taking notes, asking and answering questions, joining activities, and completing assignments. Be committed to staying in class the entire period.
Classroom Procedures				
Entering the classroom:	<ol style="list-style-type: none"> 1. Quietly find your seat. 2. Get out all materials for class (textbook, netbook, notebook, pen or pencil, calculator). 3. Start the Beginning-of-Class Quiz on Socrative. 			
When you are tardy:	<ol style="list-style-type: none"> 1. Quietly sign the Tardy Log by the front door. 2. Be seated and join the classroom activity. 			
Individual work:	<ol style="list-style-type: none"> 1. Try each problem to the best of your ability. 2. If you need help, quietly ask a specific question to your neighbor. 3. If you still need help, raise your hand to get Mr. Bowman’s attention. 4. Wait patiently and keep working on the problem. 			
Group work (problem solving):	<ol style="list-style-type: none"> 1. Put your pencil down. 2. Read the problem carefully twice. 3. Quietly discuss a plan to solve the problem with your group. 4. Pick up your pencil and begin writing a solution. 			
Turning in work:	<ol style="list-style-type: none"> 1. When you are finished with an item that is to be collected, quietly place the work in the red box near the window sill. 			
Taking care of personal needs:	<ol style="list-style-type: none"> 1. Make bathroom trips, locker trips, etc. before the bell rings. 2. If you have a need during class, quietly raise your hand to get my attention. Understand that your need may not be addressed immediately, or at all during class. 3. If granted permission, Mr. Bowman will write a hall pass. (You get THREE (3) of these each semester, so use them wisely.) Quickly finish your business and return to class. 			
Exiting the classroom:	<ol style="list-style-type: none"> 1. After the Class Meeting Summary, copy the Pre-Class Work for the next meeting in your planner. 2. Quietly put away all class materials. 3. Check the floor around you for dropped items, trash, etc. Dispose of all trash. 4. At the bell, stand, push your chair in, and quietly head to your next class. 			
If you miss class:	<ol style="list-style-type: none"> 1. Before the next class meeting, go to the class website (http://bowmanhhs.weebly.com) to access the Group Work/Problem Solving assignment. Be prepared to bring it to the next class meeting with significant progress made. You have until the class meeting after the next one to submit this. 2. Complete the Pre-Class Work for the next class meeting so that you are prepared for class. 			