Mrs. Bourque  
Algebra 2 Honors   
Katrina.bourque@polk-fl.net  
http://mathwithmrsbourque.weebly.com/  
19-213

**Course Description**

Algebra 2 Honors is an advanced college preparatory mathematics course designed to prepare students for trigonometry and pre-calculus. To ensure success in this rigorous class, students must come to class ready to participate and ask questions, turn in completed work on time, and study for quizzes and tests.

**Course Progression**

|  |  |  |  |
| --- | --- | --- | --- |
| **Semester 1** | | **Semester 2** | |
| **Quarter 1** | **Quarter 2** | **Quarter 3** | **Quarter 4** |
| * Fractions/Prerequisite Skills | * Quadratics Unit: Factoring- **QUIZ** | * Rational Root Theorem | * Exponential Equations |
| * Systems of Equations Unit: Graphing - **QUIZ** | * Solving Quadratics by Factoring | * Fundamental Theorem of Algebra | * Logarithmic Equations |
| * Systems: Substitution | * Solving Quadratics by Square Root | * Binomial Theorem; Pascal’s Triangle | * Natural Logs |
| * Systems: Elimination- **QUIZ** | * Completing the Square | * Polynomials Part 2 **TEST** | * Exponential and Log **TEST** |
| * Linear Inequalities | * Quadratic Formula-**QUIZ** | * Radicals Unit: Simplifying **QUIZ** | * Rational Functions Unit: Simplifying |
| * Systems of Inequalities | * Quadratic Word Problems | * Rationalizing denominators | * Multiplying/Dividing Rational Functions |
| * Systems with 3 Variables- **QUIZ** | * Quadratic Systems and Inequalities | * Radical operations | * Adding/Subtracting Rational Functions |
| * Fractions/Prerequisite Skills **TEST** | * Quadratics **TEST** | * Fractional exponents | * Solving Rational Functions |
| * Graphing Unit: Domain/Range | * Quadratic **Project** | * Radical equations- **TEST** | * Graphing Rational Functions- **QUIZ** |
| * Interval Notation | * Complex Numbers- **QUIZ** | * Function Operations | * Rational Functions **TEST** |
| * Transformations | * Polynomials Unit Part 1: Classifying | * Composition/ Inverse Functions- **QUIZ** | * Statistics and Probability |
| * Piece-wise Functions- **QUIZ** | * Graphing & Solving Polynomials | * Exponential & Logs Unit: Growth & Decay | * Conic Sections |
| * Standard and Vertex Form- **QUIZ** | * Long and Synthetic Division | * Transformations- **QUIZ** | * Financial Literacy **Project** |
| * Graphing **TEST** | * Polynomials Part 1 **TEST** | * Properties of Logs- **QUIZ** | * Final **EXAM** |

**Materials**

Three ring binder, Pencils, Highlighter, Loose leaf paper, Scientific or Graphing Calculator   
(If purchasing a graphing calculator, I recommend a Ti-83, 84, or 84 plus. Casio’s are more difficult to use.)   
*Wish List: Tissues, Hand Sanitizer, Clorox Wipes*

**Classroom Rules**

Students will be:   
1. **Prompt** (Be in class on time, every time.)  
2. **Polite** (Respect your teachers, your classmates, and yourself.)  
3. **Prepared** (Have your completed homework and all materials every day.)  
4. **Productive** (Successfully complete all tasks in a timely manner.)

**Consequences**

After the first week of school, any tardy students will go directly to the Choice Room. The Choice Room is also for students who must be removed during class time for disruptions including using their cell phone. In concordance with the George Jenkins’ cell phone policy, students’ phones must stay out of sight (in their backpack or in the provided pencil pouch) the entire class period unless directed by the instructor.

**Course Policies**

Any student who has more than four unexcused absences per quarter forfeits the opportunity to complete make up work for credit. If you are absent on a test day, be prepared to take the test after school on the day you return. Missed tests due to pre-excused absences and field trips must be arranged prior to the absence. **It is very difficult to make up missing work. Do not miss Algebra 2 unless it is absolutely necessary.**

**Homework, Quizzes and Tests, Grading Policy**

Homework is given to reinforce concepts taught in the classroom. Math is an ***applied*** subject. To get better, you must practice! On all assignments, you are required to **show your work**. Cheating of any kind will not be tolerated.

Throughout the semester, you will have several quizzes and tests. All tests will be announced with ample time to study. Quizzes may be announced or unannounced. However, all material on tests and quizzes will come DIRECTLY from class lecture, discussion, and your homework.

Grades will be administered on a point scale. Tests and projects will be worth 100 points, quizzes between 30-50 points, and class and homework 10-20 points.

**Additional Help**

Any time students need additional help, they are welcome to see me before or after school. I am available every Wednesday and Thursday after school until 2:45. Most every day, I am also available before school at 6:30am. Students are welcome to stay after school other days, however please let me know during class; there are times when I have conflicts after school and won’t be available.

|  |
| --- |
| **ONLINE RESOURCES FOR EXTRA HELP**  **Khan Academy** is a fabulous resource that has video tutorials for all Algebra 1 and Algebra 2 concepts (among many others). [**h**ttps://www.khanacademy.org/math/algebra2](https://www.khanacademy.org/math/algebra2)  **MathNation** (formally Algebra Nation) has videos and printable practice sheets. You can access this through ClassLink on the Polk County Schools Website. [**h**ttps://polkschoolsfl.com/classlink/](https://polkschoolsfl.com/classlink/)  **YouTube** has many great video tutorials on the mathematical concepts we will be covering. Search, the topic we are covering, watch, and learn! <https://www.youtube.com/>  **MATHhelp.com** has videos, worksheets with solutions, notes, and practice tests <https://www.mathhelp.com/algebra-2-help/>  *It is always helpful when watching video tutorials online to write down the problems and try to work them out yourself. The videos then will explain how to do it if you are stuck. Write down everything they do so you have something to reference later! Remember…there are lots of different methods used in math to solve the same concept. You may find that the tutorials teach it differently than I do. If you find a method that works better for you, and you are able to explain it to me, then use it!* |

Algebra 2 Honors  
Mrs. Bourque  
19-213

This is your first homework assignment. It is due on Friday, August 13.

Remind Codes:

2nd period: @bourque2  
4th period: @bourque4

**Students:**

* To join Remind, please text @bourque\_\_\_\_\_ to 81010.

I have read the syllabus with my parents, and I am aware of the classroom policies.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Student name (print) Class Period

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Student signature Date

**Parents:**

Please provide your phone number **AND** e-mail address so we can have open communication this year. ☺  
I have read the syllabus with my child, and I am aware of the classroom polices.  
  
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Parent name (print) Phone Number

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Parent signature Email

Please note anything you would like to tell me about your child. Thank you.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_