Algebra 2 Summer School 2015
Information Packet

Instructor: Mrs. Baronia
Room: S-1
Dates: June 3rd – June 30th
Times: 8:00am - 2:00pm
Contact: michellebaronia@mvcs.org

Attendance:

Because summer school covers a full year of Algebra II in 4 weeks, approximately a week's worth of material is covered every day. It is mandatory that students plan to attend every day of the session. **Over 2 absences in a summer school course results in no credit for the course.**

Required Materials:

Every student is required to <u>bring</u> the following items to class <u>each day</u>:

- iPad Textbook   (must be purchased on the iPad's App Store…see directions below)
- Notebook   (given on the first day)
- Pencils
- Erasers
- Ruler
- Binder paper
- Graph paper
- Scientific Calculator   (no graphing calculators)

Textbook Information:

HMH Fuse: Algebra 2 Common Core Edition for the iPad

Algebra 2 Text Instructions:

1. Download the App called HMH Fuse: Algebra 2, from the App Store, on the iPad. (The initial download is free.)
2. You must then buy the textbook as an in-App purchase, for a total of $19.99.
3. Instructions on how to download chapters as well as which chapters to download will be given in class.

Course Description:

A review and extension of computational, procedural, reasoning, and problem solving skills taught in Algebra 1 and Geometry. It strengthens algebra skills, further develops the concept of a function, and expands upon trigonometric functions in preparation for higher education. Students will deal with real-life applications and must communicate orally and symbolically about mathematics. This course also allows students to see how mathematics fits within the larger narrative of Scripture and how God's perfect plan is displayed in nature and the world around us.

Course Objectives:

Upon the successful completion of this course the student will be able to:

1. Understand function notation and operations like composition and inverse functions

2. Graph, factor, and solve quadratic equations

3. Solve systems of equations with 2 or 3 variables, using graphs, substitution, elimination, or matrices

4. Perform polynomial operations including factoring and working with rational expressions

5. Perform operations involving complex numbers, finds conjugates, and graphs complex numbers

6. Graph and solve logarithmic and exponential equations, including using basic properties to simplify equations

7. Find the general term and sums of arithmetic and geometric series

8. Recognize and graphs the conic sections centered on the origin

9. Find the probability of an event by using permutations and combinations, the binomial theorem, and independent/dependent probabilities

Course Outline:

Unit One: Linear Functions Review
Unit Two: Quadratic Functions
Unit Three: Polynomial Functions
Unit Four: Rational and Radical Functions
Unit Five: Exponential and Logarithmic Functions
Unit Six: Properties and Attributes of Functions
Unit Seven: Conic Sections
Unit Eight: Sequences and Series
Unit Nine: Probability
Unit Ten: Data Analysis and Statistics
Unit Eleven: Trigonometric Functions

Grading:

Each student's semester grade (10 school days = 1 semester) will be determined as follows:

Participation:	10%
Homework:	25%
Quizzes:	25%
Tests:	40%

Participation:

Students can earn up to 5 points per day (25 points a week). Points can be earned by doing the following:

- Being in the assigned seat <u>before</u> the bell rings at 8:00am
- Returning from breaks on time
- Taking neat and complete notes in the required notebook
- Staying focused on the material being taught throughout the day
- Being actively involved in all class activities
- Asking questions when needed

If a student is absent, he/she will automatically receive a zero for participation for that day. There is no way to make up the missing points.

Homework:

Because we will be covering about a week's worth of material in one day, **homework assignments are extremely important to complete each night**. Students should be expecting to have a maximum 2-3 hours of work each night. Without completing the nightly practice, it would be very difficult to pass the course. Self-motivation and determination are a must!

In order to receive full credit on an assignment, a student must
- Attempt all of the assigned problems
- Show all work in pencil (assignments done in pen will not be accepted)
- Include first and last name, date, and the assignment in the heading
- Turn in the assignment on time
- Complete all graphing problems on graph paper

Assignments that are 1 day late can earn up to a 50%. Any assignments turned in after this will not receive credit.

Quizzes:

Students should expect to have about 2 unannounced quizzes (pop-quizzes) each day.
- *Homework Quiz* : 3-5 problems checking on homework understanding
- *Notebook Quiz* : 3-5 problems with open notes checking the understanding of current concepts taught that day (given towards the end of class)

Tests:

- Since there are 11 required units and 4 weeks to complete those, students should expect to have an average of 2-3 chapter tests a week.

- There will be a *Semester 1 Final* on Tuesday, June 16th and a *Semester 2 Final* on Tuesday, June 30th. Each final exam score will be equivalent to 2 regular tests and will be averaged into that category.

- If a student misses a test due to an absence, it is his/her responsibility to make it up on the next day after school. Failing to do so will result in a zero for the test.

- Calculators are *usually* allowed on both tests and quizzes. (iPads and cell phones are not allowed to be used in class as a calculator.) Borrowing or sharing a calculator during class time is not allowed.

Breaks:

Students will be given a morning break each day around 9:30am and a lunch break around 11:45am. Food will be available for purchase during this time at the café.