Mr. Malone **Room: 327**
Email: tmalone@longbranch.k12.nj.us **Google Voice Number:** 732-455-9013
please feel free to email or text me with any questions or concerns throughout the year

Expectations:

1. This classroom is a safe space.
2. Show respect.
3. Be in class, on time.
4. Be prepared (charged chromebooks, notebook, writing utensil)
5. Limit distractions. Cell phones and headphones are to not be used during class.
6. Be present – you get out what you put in.

Consequences:

1. Warning/Reminder
2. Teacher Detention and Parent Phone Call
3. Referral
4. School Detention, ISS, etc.

Course Description: Precalculus is a thoughtful introduction to advanced studies leading to calculus. The course briefly reviews linear equations, inequalities, and systems and moves purposefully into the study of functions. Students then discover the nature of graphs and deepen their understanding of polynomial, rational, exponential, and logarithmic functions. Scaffolding rigorous content with clear instruction, the course leads students through an advanced study of trigonometric functions, matrices, and vectors. The course concludes with a short study of probability and statistics.

Textbook: Precalculus: Graphical, Numerical, Algebraic

Class Supplies

- Pencils with erasers
- 3-ring binder with loose-leaf OR multi subject notebook with a folder
- School issued Chromebook, charged
- **Calculator Policy**: Each student will be assigned a specific calculator and is responsible for returning it at the end of each class period.
    - Suggested to download the Calculate84 app on your phone for home use or access to DESMOS

Attendance Policy: If a student is absent, **THE STUDENT** is responsible for looking at Google Classroom to see what was missed. Since math topics build on one another, it is imperative students meet with the teacher during SAP as soon as possible to make up work. **Students absent during a test or quiz should be prepared to take it immediately upon return.** Leaving class to use the bathroom or see a nurse should be quick and infrequently done to avoid missing course work. Please ask the teacher when you need to do so.

Grading Policy: Each marking period is worth 25% of the final course grade. Assignments are grouped into categories and will be clearly noted.

Level 1 – 20% (do nows, notebook checks, exit tickets, participation, homework for completion)

Level 2 – 30% (homework for accuracy, classwork assignments/activities)

Level 3 – 50% (quizzes, tests, mastery tasks, projects)

Homework: Homework provides the student with the opportunity to practice and reinforce skills. Homework may be graded based on completion or accuracy depending on the assignment. **NO WORK = NO CREDIT.**

Google Classroom: Students are expected to check the google classroom stream on a daily basis. Daily work, links to assessments, homework assignments, study guides, answer keys, resources, etc. will be posted.

Genesis: Please check Genesis regularly to note your course grade and missing work. **A "M" in Genesis indicates missing work that needs to be made up and averages into the grade as a "0" on the assignment.** Until the work is made up, it may drastically decrease your grade in the course. **A "0" indicates the assignment was not completed and may not be made up (past the cutoff date).** Please keep track of school cut off dates if work is not completed on time. '

Cellphones: are not to be seen during class (this goes for headphones as well).

Extra Help (SAP): I am available Monday and Thursday during SAP period. Do not wait until the day before a test to attend! Students may be asked to attend mandatory SAP sessions if they receive below passing grades on quizzes and tests.

Zero Cheating Policy: (includes cellphones). Students must remain academically honest and put their best foot forward during assessments. Otherwise the assessment will be marked as a 0. This includes skipping class on an assessment day!

I have read the course syllabus for Mrs. Sarno's class and I understand the expectations and requirements. I understand the rules and policies set forth in the student handbook are also applicable in this course.

Student Signature: Parent Signature:

Date:

Unit #	Unit Name	Major Topics Discussed
1	**Polynomial and Rational Functions**	• Functions and Their Properties • Twelve Basic Functions • Building Functions from Functions • Inverse Functions • Graphical Transformations • Linear and Quadratic Functions • Power Functions with Modeling • Graphs of Rational Functions • Polynomial Functions of Higher Degree with Modeling • Real Zeros of Polynomial Functions • Complex Zeros and the Fundamental Theorem of Algebra • Solving Equations in One Variable (Extraneous Solutions)
2	**Exponential and Logarithmic Functions**	• Real Numbers • Exponential and Logistic Functions • Exponential and Logistic Modeling • Logarithmic Functions and Their Graphs • Properties of Logarithmic Functions • Equation Solving and Modeling • Binomial Theorem • Sequences
3	**Trigonometric and Polar Functions**	• Angles and Their Measures • Trigonometric Functions of Acute Angles • Circular Functions- The Unit Circle • Graphs of all Trigonometric Functions • Inverse Trigonometric Functions • Solving Problems with Trigonometry • Fundamental Identities • Proving Trigonometric Identities • The Law of Sines • The Law of Cosines • Vectors in the Plane • Dot Product of Vectors • Polar Coordinates • Graphs of Polar Equations
4	**Geometric and Matrix Functions**	• Solving Systems of Two Equations • Matrix Algebra • Multivariate Linear Systems and Row Operations • Conic Sections • Circles and Ellipses • Hyperbolas • Polar Equations of Conics • Three-Dimensional Cartesian Coordinate System
5	**Intro to Calc and Stats**	• Limits and Motion: The Tangent Problem • Limits and Motion: The Area Problem • Numerical Derivatives and Integrals • Probability • Statistics (Graphical and Numerical)