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Course Overview and Objectives

Welcome to 10th grade math! With the completion of Algebra I and Geometry, you are now prepared for a journey into advanced mathematics. This course begins with an extensive review of the core of Algebra, and then continues with a deep study of functions, probability, sequences and series, and systems of equations.

The primary objective of 10th grade Algebra 2/Trig is for students to ***master the analysis of functions algebraically and graphically***. More specifically, students will be able to:

- Analyze and transform quadratic, polynomial, exponential, and logarithmic functions both algebraically and graphically.
- Solve two-variable and multi-variable systems of linear equations using a variety of methods.
- Solve systems of inequalities, both linear and non-linear.
- Analyze arithmetic and geometric sequences and series.
- Use the binomial theorem to expand a binomial of any power.
- Analyze problems of permutations, combinations, and probability.

Most (if not all) students will find this course challenging yet rewarding. With much diligence and perseverance you can accomplish something that right now might seem impossible. Be patient and stay on top of your studies and success will come. DO NOT hesitate to ask for help! Other tips for success are listed below:

- ***Take notes*** during class and keep them organized.
- ***Complete, correct, and keep*** daily homework.
- ***Participate*** in class discussions, work on in-class problems, and ***ask*** lots of questions!
- ***Prepare*** for quizzes and tests by reviewing your notes and completing assigned review problems.
- ***Seek extra help*** if you are struggling!
- Use our class time wisely, persevere through the daily homework, be patient with yourself (and me), and you will be surprised at how much you can grow!

Course Materials

- Pencil/eraser (pen is **not allowed** on any assignment, including tests and quizzes)
- Binder (to keep all notes, homework, and assessments)
- Graph paper (loose or in a notebook)

- Textbook (needs to be brought to class every day)
- Graphing calculator (charged or with good batteries)

Tutoring Hours

Tutoring will be available Monday-Thursday after school or by appointment.

Course Expectations: Assignments and Assessments

Participation: Participation is an important part of the mathematics classroom, although participation in math can look very different than it does in other classes. I certainly understand that personalities vary, and I do not expect every student to contribute to the classroom in the same ways. However, maintaining a focused academic presence, answering and asking questions, and presenting homework solutions are all excellent ways of being an active member the learning community. You will receive a weekly participation grade.

Tests: There will be 3–5 tests per quarter, typically at the end of a chapter. There are certain chapters which include two tests, due to their length. Tests are the formal assessment of your understanding of the topics we have been discussing in class, and as such are worth the majority of your grade. The best ways to prepare for tests are to complete the review assignments and to review any quizzes from the chapter, focusing especially on the problems you missed originally.

Quizzes: There will be 6-9 quizzes per quarter, usually once or twice throughout a chapter. Quizzes are intended to assess how well you are progressing with the material in the chapter, and to make you aware of any topics on which you need to get clarification. The best ways to prepare for quizzes are to complete your homework assignments and to complete the review assignment.

Homework: You will be assigned homework most days. Most homework assignments will be due the next school day. Typically, homework assignments are worth 10 points. **_All assignments_** are due at the beginning of the class. If assignments are turned in later during the class, they will be considered late. I will not necessarily check homework every day, but I do reserve the right to check homework at any time. When I check your homework, I will be looking to make sure that all problems are done (you must attempt **every** problem), and that all work is shown.
I cannot emphasize strongly enough the importance of **UNDERSTANDING** the homework problems during the course of each chapter. This means checking your answers while doing the problems, figuring out any incorrect problems, and asking questions about those you don't understand. **_In math, understanding the homework is everything!!!_**
- **Check and correct** your homework with a pen using the text or other solution source.
- **Keep all homework** in your binder to help study for tests.
- **Attempt all problems!** At a **_minimum_**, write down the problem, your best attempt at a solution, and any questions you have about the problem to ask the next class period.
- In order to receive full credit on a homework assignment you must use the correct heading, attempt every problem, show your work, and check all problems with available solutions using a different colored pen or pencil.

Absent Policies

- If you are absent one or two days, you will have one day for each day you missed to make up assignments. If you are absent three or more days in a row, we will work together on a plan to get you caught up. If you are absent, it is YOUR RESPONSIBILITY to get the notes and assignments that you missed, and to turn in any make-up work.
- If you miss **only** a test or a quiz, expect to make it up the day you return.
- If you miss **only** a review day, expect to take the test with the rest of the class.

Late Assignment Policy

If assignments are not completed on time, they may be turned in the next day for half credit. If they are turned in any later, you will receive no credit.

Course Grading

Course Work	Percentage
Participation & Homework	20%
Tests	60%
Quizzes	20%
TOTAL	**100%**

*Students must have a passing (>60%) test average in order to pass this course.

Academic Policies and Institutional Resources

All student work (tests, quizzes, homework, projects) will be returned within one week of submission, with minor exceptions. Essays will be returned within two weeks of submission. Please refer to Scottsdale Prep's Family Handbook pp. 26-38 for more information on the academy's policies.

Cut--Cut and Return--Cut

Dear Parents/Guardians,

Please take the time to read this syllabus with your student, so that you both may understand the expectations and requirements for this class. After reading the syllabus, please sign below to indicate that you have read and understand this information, tear off this page, and return to your student. Your student's first assignment will be to return this page, with your signature, to me by Friday, August 9th. Please feel free to contact me at any time throughout the semester with any questions or concerns.

Sincerely,

Ms. Noelani Harman

Student Name (Please Print): _____   Period (e.g. 3rd): _____

Student Signature: _____   Date: _____

Parent/Guardian Signature: _____.   Date: _____