HM2 : Pre Calculus
Course Curriculum

FALL SESSION (SEP - DEC) - 12 Classes	
Units	**Topics**
Unit 1A	***Chapter 1: Algebra Fundamentals*** ● Number Systems ● Natural Numbers (Counting Numbers) ● Whole Numbers ● Integers
Unit 1B	***Chapter 1: Algebra Fundamentals (continued)*** ● Rational Numbers ● Irrational Numbers ● Real Numbers ● Complex Numbers
Unit 1C	***Homework Review, 1 on 1 with Teacher, Bi-Weekly Test***
Unit 1D	***Chapter 1: Algebra Fundamentals (continued)*** ● Complex Numbers ● Properties of the Real Numbers ● Some Operations on Complex Numbers ● Exercises
Unit 1E	***Chapter 2: Linear Functions and Equations*** ● Linear Relations ● Linear Equations ● The Graph of a Linear Equation ● Linear Equations From Two Points
Unit 1F	***Homework Review, 1 on 1 with Teacher, Bi-Weekly Test***
Unit 2A	***Chapter 2: Linear Functions and Equations (continued)*** ● The Slope of a Linear Equation ● The Vertical and Horizontal Intercepts ● Forms of Linear Equations
Unit 2B	***Chapter 2: Linear Functions and Equations (continued)*** ● Parallel and Perpendicular Lines

	● Linear Functions ● Exercises
Unit 2C	*Homework Review, 1 on 1 with Teacher, Bi-Weekly Test*
Unit 2D	*Chapter 3: Linear Inequalities* ● Inequalities ● Some Real Number Properties ● Linear Inequalities
Unit 2E	*Chapter 3: Linear Inequalities (continued)* ● Linear Inequalities ● Graphing Absolute Value Functions ● Exercises
Unit 2F	*Homework Review, 1 on 1 with Teacher, Bi-Weekly Test*
WINTER SESSIONS (JAN - MAR) - 12 Classes	
Unit 3A	*Chapter 4: Quadratic Functions (continued)* ● Understanding quadratic Functions ● Identifying quadratic Equations
Unit 3B	*Chapter 4: Quadratic Functions* ● Solutions to Quadratic Equations ● Exercises
Unit 3C	*Homework Review, 1 on 1 with Teacher, Bi-Weekly Test*
Unit 3D	*Chapter 5: Polynomials and Rational Expressions* ● Polynomials ● Adding and Subtracting Polynomials ● Multiplying Polynomials
Unit 3E	*Chapter 5: Polynomials and Rational Expressions (continued)* ● Dividing Polynomials ● Factoring Polynomials ● Partial Fraction Decomposition
Unit 3F	*Homework Review, 1 on 1 with Teacher, Bi-Weekly Test*
Unit 4A	*Chapter 5: Polynomials and Rational Expressions (continued)* ● Partial Fraction Decomposition ● Rational Expressions ● Exercises

Unit 4B	**Chapter 6: Exponentials and Logarithms** • Exponential Functions • Graphing Exponential Functions • Multiplying and Dividing Exponential Functions
Unit 4C	*Homework Review, 1 on 1 with Teacher, Bi-Weekly Test*
Unit 4D	**Chapter 6: Exponentials and Logarithms (continued)** • The Irrational Number e • Logarithms
Unit 4E	**Chapter 6: Exponentials and Logarithms (continued)** • More Logarithms • Antilogarithms • Exercises
Unit 4F	*Homework Review, 1 on 1 with Teacher, Bi-Weekly Test*
SPRING SESSION (APR - JUN) - 12 Classes	
Unit 5A	**Chapter 7: Trigonometric Functions** • Angles • Trigonometric Functions • A Trigonometric Identity
Unit 5B	**Chapter 7: Trigonometric Functions (continued)** • A Trigonometric Identity • The Inverse Trigonometric Functions • Exercises
Unit 5C	*Homework Review, 1 on 1 with Teacher, Bi-Weekly Test*
Unit 5D	**Chapter 8: Trigonometry** • Right-Triangle Trigonometry • Trigonometric Formulas
Unit 5E	**Chapter 8: Trigonometry (continued)** • More on Trigonometric Formulas • Exercises
Unit 5F	*Homework Review, 1 on 1 with Teacher, Bi-Weekly Test*
Unit 6A	**Chapter 9: Graphing Functions** • Graphing a Function • Descriptive Properties of Function Graphs

	● Log-Linear and Log-Log Graphs
Unit 6B	***Chapter 9: Graphing Functions (continued)*** ● Polar Graphs ● Exercises
Unit 6C	***Homework Review, 1 on 1 with Teacher, Bi-Weekly Test***
Unit 6D	***Chapter 10: Sequences and Series*** ● Sequences ● Series
Unit 6E	***Chapter 10: Sequences and Series (continued)*** ● The Binomial Theorem ● Exercises
Unit 6F	***Homework Review, 1 on 1 with Teacher, Bi-Weekly Test***