



PRE-CALCULUS 12

TEACHER: Mr. Basil Williams

ROOM: 109

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TEXTBOOK: iWrite Math 12: Pre-Calculus Mathematics – BC Edition

COURSE OBJECTIVE

Pre-Calculus 12 is designed to develop advanced mathematical skills needed for post-secondary studies in mathematics, sciences, engineering, or related fields. Students will extend their knowledge of functions, trigonometry, sequences and series, logarithms, and more. Emphasis is placed on solving problems, reasoning abstractly, and applying concepts to real-world and theoretical contexts.

COURSE CONTENT

Term 1

Unit 1: Functions and Transformations

Unit 2: Polynomial Functions

Unit 3: Rational Functions

Term 2

Unit 4: Exponential and Logarithmic Functions

Unit 5: Geometric Sequences and Series

Term 3

Unit 6: Trigonometry

Unit 7: Cumulative Review and Projects

Final projects or enrichment topics

Final Exam Preparation and Assessment



SUPPLEMENTARY RESOURCES

YouTube: Mathematics is the sense you never knew you had | Eddie Woo | TEDxSydney

Book: A Mathematician Reads the Newspaper

Book: How Not to Be Wrong: The Power of Mathematical Thinking

Book: Mathematical Sorcery

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YouTube: *Mathematics is the sense you never knew you had* | Eddie Woo | TEDxSydney

Book: *A Mathematician Reads the Newspaper* – John Allen Paulos

Book: *How Not to Be Wrong: The Power of Mathematical Thinking* – Jordan Ellenberg

Book: *Mathematical Sorcery* – David Berlinski

SUPPLIES (to be brought to every class)

2-inch 3-RING binder with lined paper

Pencils, eraser, Ruler*, Protractor*, Compass (OR *Complete Geometry set)

Scientific or Graphing Calculator (Recommended models: TI-83/84 or Desmos app)

MARK BREAKDOWN

Classwork 40%

Includes readings, activities, and workbook assignments.

Quizzes 20%

There will be a quiz on the topics we covered in class after each unit is completed.

Mid and Term Finals 20%

Both mid and term finals will be cumulative tests covering multiple units.

Final Exam 20%

There will be a final examination covering the entire course.