## **Curriculum Map: Advanced Trigonometry**

Course: ADV TRIGONOMETRY Sub-topic: Trigonometry

Grade(s): 10 to 12

**Course Description:** This advanced level course will provide a faster-paced, more rigorous course-work, and deeper study of the same content offered in the Academic Trigonometry course including the study of triangles and the functions formed by the ratio of a right triangle embedded in a circle of radius one. Topics covered in this course include trigonometric functions, identities, and applications of trigonometric functions, exponential functions, logarithmic functions, and conic sections. This course has a strong emphasis on the use of technology with the learning of mathematics. This course is recommended for all college-bound students and is required for Honors Calculus.

#### Unit: Unit 0 - Introduction, Syllabus

#### Topic: 0.1 Syllabus

Minutes for Topic: 86

Topic: 0.2 Required Elements (Non-negotiables) Minutes for Topic: 86

#### Unit: Unit 1 - Review of Previously Learned Skills

Topic: 1.1 Geometry Concepts Minutes for Topic: 86

#### Topic: 1.2 Graphing, Intercepts, Symmetry

#### **Topic: 1.3 Functions**

Topic: 1.4 Review and Test Minutes for Topic: 172

#### **Unit: Unit 2 - Trigonometric Functions**

#### Topic: 2.1 Angles and Their Measure

- Topic: 2.2 Right Triangle Trigonometry
- **Topic: 2.3 Values of Trigonometric Functions**
- **Topic: 2.4 Trigonometric Functions of General Angles**
- Topic: 2.5 Unit Circle
- **Topic: 2.6 Review and Test**

## Unit: Unit 3 - Graphing Trig Functions

Topic: 3.1 Graphs of Sine and Cosine Functions

Topic: 3.2 Graphs of Tangent, Cotangent, Cosecant, and Secant

**Topic: 3.3 Writing Equations from Graphs** 

Topic: 3.4 Review and Test

## Unit: Unit 4 - Analytic Trigonometry

This Curriculum Map Unit has no Topics to display

## Unit: Unit 5 - Applications of Trigonometry

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## Unit: Unit 6 - Exponential and Logarithmic Functions

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# Unit: Unit 7 - IF TIME PERMITS - Analytic Geometry

This Curriculum Map Unit has no Topics to display

## Unit: Unit 8 - Review and Final Exam

This Curriculum Map Unit has no Topics to display