

## Curriculum Map: Academic Trigonometry

Course: ACADEMIC TRIGONOMETRY Sub-topic: Trigonometry

Grade(s): 10 to 12

**Course Description:** Trigonometry is the study of triangles and the functions formed by the ratio of a right triangle embedded in a circle of radius one. Topics covered include a basic introduction to 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 Precalculus and Honors Calculus.

### Unit: Unit 1: Review of Algebra 2 and Geometry and 2.1

#### Topic: Review of Algebra 1 and 2

Minutes for Topic: 258

#### Topic: Review of Geometry

Minutes for Topic: 430

#### Topic: 2.1 Angles in Standard Position

Minutes for Topic: 172

#### Topic: 2.1 Degrees/Minutes/Seconds

Minutes for Topic: 86

#### Topic: 2.1 Radian Measure

Minutes for Topic: 172

#### Topic: 2.1 Arc Length and Area of Sector

Minutes for Topic: 172

#### Topic: 2.1 Linear and Angular Velocity

Minutes for Topic: 172

#### Topic: Unit 1 Review and Test

Minutes for Topic: 172

### Unit: Unit 2: 2.2-2.4

#### Topic: 2.2 Right Triangle Trigonometry

Minutes for Topic: 172

#### Topic: 2.2 Identities

Minutes for Topic: 258

#### Topic: 2.3 Trig Functions of Special Right Triangles

Minutes for Topic: 258

#### Topic: 2.4 Trig Functions in Different Quadrants

Minutes for Topic: 172

#### Topic: 2.4 Reference Angle/Coterminal Angles/Quadrantal Angles

Minutes for Topic: 258

#### Topic: 2.2-2.4 Review and Test

Minutes for Topic: 172

### Unit: Unit 3: 2.5-2.6

#### Topic: 2.5 Unit Circle in One Positive Rotation

Minutes for Topic: 172

#### Topic: 2.5 Unit Circle With More Than One Rotation and Negative Angles

Minutes for Topic: 172

#### Topic: 2.5 Domain and Range of Trig Functions

Minutes for Topic: 86

#### Topic: Parent Functions and Transformations Review of Algebra 2

Minutes for Topic: 172

**Topic: 2.6 Graphing Sine and Cosine with no Phase Shifts**

Minutes for Topic: 258

**Topic: 2.6 Writing Equations of Sine and Cosine Graphs With No Phase Shifts**

Minutes for Topic: 172

**Topic: 2.5-2.6 Review and Test**

Minutes for Topic: 172