

Precalculus Instructional Guide and Syllabus

State-Approved Curriculum:

Tennessee Academic Standards found [here](#).
White County Board Policy [4.400](#) - Instructional Materials

Quarter 1: 8/5- 10/9		
Essential Standards: Algebra Review, Functions, Limits, Continuity, Tangent Line Problem, Definition of a Derivative, and Operations on Functions, Composite Functions, Inverse Functions, Graphing Basic and Rational Functions, and Exponential Functions		
Main Objectives	Documents & Resources	Major Assignments
<p>Week 1: Algebra Review</p> <p>Week 2 - 3: Functions (Limits, Continuity, Tangents, Definition of a Derivative)</p> <p>Week 4: Operations, Composite, and Inverse Functions</p> <p>Week 5 - 6: Graphing Basic and Rational Functions, Conic Sections</p> <p>Week 7 - 9: Exponential Functions (2.5 weeks)</p>	<p>Various worksheets, Chapter 2.1- 2.5, 10.1-10.4</p> <p>Chapter 1.1-1.4, 12.1-12.4, additional worksheets</p> <p>Chapter 1.8,1.9, additional worksheets</p> <p>Chapter 1.5-1.7, 2.6, 10.1-10.4, additional worksheet</p> <p>Chapter 3, additional worksheets</p>	<p>Algebra Review Test</p> <p>Test 1.1-1.4, 12.1-12.4</p> <p>Test 1.8,1.9</p> <p>Test Chapter 1.5-1.7, 2.6, 10.1-10.2</p> <p>Test Exponential Functions Budget Project</p>

Quarter 2: 10/17-12/19**Essential Standards: Logarithmic Functions, Trigonometry (Definitions, Unit Circle, Bearings, Vectors, Solving Word Problems, Graphing, Identities)**

Main Objectives	Documents & Resources	Major Assignments
Week 9 - 10: Logarithmic Functions (1.5 weeks)	Chapter 3, additional worksheets	Test Logarithmic Functions
Week 11 - 13: Introduction to Trigonometry, Unit Circle, Graphing and Solving Trigonometric Word Problems (2.5 weeks)	Chapter 4.1-4.6, additional worksheets	Earthquake Project Test Chapter 4.1-4.4
Week 13 - 14: Bearings and Vectors (1.5 weeks)	Chapter 6, additional worksheets	Test Graphing Trig. Functions (Chapter 4.5-4.6)
Week 15 - 16: Trigonometric Identities	Chapter 5, additional worksheets	Test Bearings/Vectors
Week 17: Matrices and Systems of Equations	Chapter 7 - 8, additional worksheets	Test Trigonometric Identities
Week 18: Polar Coordinates and Parametric Equations; Sequences and Series	Chapter 9.1 - 9.3, 9.5, 10.6-10.9	Test Matrices and Systems of Equations Test Polar Coordinates and Parametric Equations