

Year At A Glance

Pre-Calculus

1 st Six Weeks	2 nd Six Weeks	3 rd Six Weeks
<ul style="list-style-type: none"> ➤ Functions and their Graphs ➤ 1.1 Rectangular Coordinates ➤ 1.2 – Graphs of Equations ➤ 1.5 – Analyzing Functions (Even/Odd functions only) ➤ 1.3 – Linear Equations in Two Variables ➤ 1.4 – Functions ➤ 1.5 – Analyzing Graphs of Functions ➤ 1.6 – A Library of Parent Functions ➤ 1.7 – Transformation of Functions ➤ 1.8 – Combinations of Functions: Composite Functions ➤ 1.9 – Inverse Functions ➤ 1.10 – Mathematical Modeling and Variation ➤ Problem Solving 	<ul style="list-style-type: none"> ➤ Polynomial and Rational Functions ➤ 2.1 – Quadratic Functions and Models ➤ 2.2 – Polynomial Functions of Higher Degree ➤ 2.3 – Polynomial and Synthetic Division ➤ 2.4 – Complex Numbers ➤ 2.5 – Zeros of Polynomial Functions ➤ Appendix A.4 – Simplify/Multiply/Divide/ Add/Subtract Rational Expressions ➤ 2.6 – Rational Functions ➤ Appendix A.4 – Simplifying Complex Fractions ➤ Problem Solving 	<ul style="list-style-type: none"> ➤ Exponential & Logarithmic Functions ➤ 3.1 – Exponential Functions and their graphs ➤ 3.2 – Logarithmic Functions and their graphs ➤ Properties of Logarithms ➤ Exponential and Logarithmic Functions ➤ Unit Circle – The Paper Plate Project ➤ Trigonometry ➤ 4.1 – Radian and Degree Measure ➤ 4.2 – Trigonometric Functions ➤ 4.3 – Right Triangle Trigonometry ➤ Problem Solving
4 th Six Weeks	5 th Six Weeks	6 th Six Weeks
<ul style="list-style-type: none"> ➤ Trigonometry ➤ 4.4 – Trigonometric Functions of Any Angle ➤ 4.5 – Graphs of Sine and Cosine Functions ➤ 4.6 – Graphs of other Trigonometric Functions ➤ 4.7 – Inverse Trigonometric Functions ➤ 4.8 – Applications and Models ➤ Analytic Trigonometry ➤ 5.1 – Using Fundamental Identities ➤ 5.2 – Verifying Trigonometric Identities ➤ 5.3 – Solving Trigonometric Equations ➤ 5.4 – Sum and Difference Formulas ➤ 5.5 - Multiple-Angle and Product-to-Sum Formula ➤ 6.1 – Law of Sines ➤ Problem Solving 	<ul style="list-style-type: none"> ➤ Additional Topics of Trigonometry ➤ 6.2 – Law of Cosines ➤ Exploration of laws of sine and cosine (application problems) ➤ 6.3 – Vectors in the Plane ➤ Sequences, Series, and Probability ➤ 9.1 – Sequences and Series ➤ 9.2 – Arithmetic Sequences and Partial Sums ➤ 9.3 – Geometric Sequences and Series ➤ 9.5 – The Binomial Theorem ➤ 9.6 – Counting Principles ➤ 9.7 – Probability ➤ Topics in Analytic Geometry ➤ 10.2 – Introduction to Conics: Parabolas ➤ 10.3 – Ellipses ➤ 10.4 – Hyperbolas ➤ Problem Solving 	<ul style="list-style-type: none"> ➤ Topics in Analytic Geometry ➤ Conic Applications – Reflective light and sound ➤ 7.1 – Linear and Nonlinear Systems of Equations ➤ 10.6 – Parametric Equations ➤ 10.7 – Polar Coordinates ➤ Advanced Factoring Practice – pg. A33 ➤ 7.3 - Multivariable Linear Systems ➤ Problem Solving