KRSS Course Outline Pre-Calculus 12
Mr. C. Sdoutz

Unit 1 – Transformations & Functions

1.1 Horizontal & Vertical Translations
1.2 Reflections & Stretches
1.3 Combining Transformations
1.4 Inverse of a Relation

Unit 2 – Radical Functions

2.1 Radical Functions & Transformations
2.2 Square Root of a Function
2.3 Solving Radical Equations Graphically

Unit 3 – Polynomial Functions

3.1 Characteristics of Polynomial Functions
3.2 The Remainder Theorem
3.3 The Factor Theorem
3.4 Equations & Graphs of Polynomial Functions

Unit 4 – Trigonometry & The Unit Circle

4.0 Standard Position Trig Review
4.1 Angles & Angle Measure
4.2 The Unit Circle
4.3 Trigonometric Ratios
4.4 Intro to Trigonometric Equations

Unit 5 – Trigonometric Functions & Graphs

5.1 Graphing Sine & Cosine
5.2 Transformations of Sinusoidal Functions
5.3 The Tangent Function
5.4 Equations & Graphs of Trigonometric Functions

Unit 6 – Trigonometric Identities

6.1 Reciprocal, Quotient & Pythagorean Identities
6.2 Sum, Difference & Double Angle Identities
6.3 Proving Identities (2 Days)
6.4 Solving Trigonometric Equations Using Identities

Unit 7 – Exponential Functions

7.1 Characteristics of Exponential Functions
7.2 Transformations of Exponential Functions
7.3 Solving Exponential Equations (2 days)

Unit 8 – Logarithmic Functions

8.1 Understanding Logarithms
8.2 Transformations of Logarithmic Functions
8.3 Laws of Logarithms
8.4 Logarithmic & Exponential Equations

Unit 9 – Rational Functions

9.1 Exploring Rational Functions Using Transformations
9.2 Analysing Rational Functions
9.3 Connecting Graphs & Rational Equations

Unit 10 – Function Operations

10.1 Sums & Differences of Functions
10.2 Products & Quotients of Functions
10.3 Composite Functions

Unit 11 – Permutations, Combinations & The Binomial Theorem

11.1Permutations
11.2 Combinations
11.3 The Binomial Theorem