Algebraic Reasoning Year-At-A-Glance

Term 1	Term 2	Term 3	Term 4
Linear Functions • Writing Linear Functions • Modeling Linear Functions Time: 3 weeks **Quadratic Functions** • Writing Quadratic Functions • Modeling Quadratic Functions Time: 2 weeks **Exponential Functions** • Writing Exponential Functions • Modeling Exponential Functions Time: 1 week **Transformations** • Transforming and Analyzing Linear Functions • Transforming and Analyzing Quadratic Functions • Comparing Sets of Functions Time: 1 week	**Algebraic Methods (Part 1)** • Adding and Subtracting Polynomial Functions • Multiplying Linear Functions • Compare and Contrast Adding of Linear Functions Time: 2 weeks **Decomposition Quadratic Functions** • Factoring Polynomials with Graphs and Tables • Decomposition of Quadratic Functions Time: 1 week **Solutions of Equations** • Solving Linear and Quadratic Equations • Systems of Equations by Graphing • Writing Systems of Linear Equations Time: 1 week **TEKS Review** Time: 3 weeks **Semester Exam**	**Cubic Functions** • Writing Cubic Functions • Modeling Cubic Functions • Transforming Cubic Functions • Analyzing Cubic Functions Time: 1 week **Transforming & Analyzing Functions** • Absolute Value Functions • Exponential Functions • Rational Functions Time: 2 weeks **Inverses of Functions** • Generating Inverses of Functions • Verifying Inverses of Functions • Square Root Functions • Cube Root Functions • Logarithmic Functions • Comparing and Contrasting Sets of Functions Time: 3.5 weeks **Algebraic Methods (Part 2)** • Adding Polynomial Functions with Tables and Algebra • Subtracting Polynomial Functions with Tables and Algebra • Multiplying Polynomial Functions with Tables and Algebra Time: 1.5 weeks **Algebraic Methods (Part 3)** • Dividing Polynomial Functions with Tables and Algebraic Methods • Composing Functions • Multiple Representations of Combined Functions Time: 1 week	**Matrices** • Add, Subtract, Multiply Matrices • Solve Systems (Two and Three Linear Equations) Time: 3 weeks **Factoring Polynomials Algebraically** • GCF • $a=1$; $a\neq1$ • Special Cases Time: 2 weeks **Estimating Solutions** • Estimating Function Values • Rational, Exponential, Logarithmic, Square Root, and Cubic Functions Time: 1 week **Semester Exam**

*Algebraic Reasoning by Cosenza & Associates is the instructional material resource.
Timeframes may vary slightly based on student needs.