

**Tech Algebra II
District 2853**

Month	Content	Performance Standards Addressed Grades 9-11 Grades 11-12	Skills for Student Achievement	Assessment
September		Algebra - Benchmarks #6, #11 Mathematical Reasoning - Benchmark #3 Computation & Operation - Benchmarks #1, #2 Patterns and Functions - Benchmarks #2, #4	<ul style="list-style-type: none"> · Expand powers · Evaluate roots · Convert to and from fractional exponents · Solve problems using powers, roots, and fractional exponents 	
October		Patterns and Functions - Benchmark #2 Algebra - Benchmark #4 Geometry - Benchmark #3	<ul style="list-style-type: none"> · Solve problems using formulas · Rearrange and substitute into formulas to solve · Use Pythagorean Theorem to solve problems 	
November		Patterns and Functions - Benchmarks #1, #3 Algebra - Benchmark #3	<ul style="list-style-type: none"> · Solve problems using Linear Equations · Find slope and intercept · Use slope intercept form 	
December		Patterns and Functions - Benchmark #1 Algebra - Benchmarks #3, #7	<ul style="list-style-type: none"> · Use Cartesian coordinate plane · Graph $y = m x + b$; $y =$ some number; $x +$ some number; $x = 0$, $y = 0$ · Know the term origin 	
January and February		Patterns and Functions - Benchmarks #1, #2, #3, #4	<ul style="list-style-type: none"> · Solve problems involving non-linear equations · Understand and use the following types of equations: quadratic, exponential, inverse, parabola, hyperbola, circle, ellipse, radical 	
February and March		Data and Statistics - Benchmark #7	<ul style="list-style-type: none"> · Use coloring theory to color maps by incorporating vertex-edge graphs to color with least cost · Solve problems using Hamiltonian and Eulerian paths, circuits, and walks · Use alternative election processes to determine the winner · Solve problems about fair division of property 	

April		Data and Statistics - Benchmarks #1, #2, #3, #4	Statistics - Benchmark #1	<ul style="list-style-type: none"> · Understand, determine and use, mean, median and mode · Discern the meaningful use of each · Construct histograms · Understand and solve problems using frequency, range, standard deviation and normal curves · Use curve fitting to solve problems 	
May		Probability - Benchmark #1, #2, #4, #5, #6		<ul style="list-style-type: none"> · Solve probability problems using counting, permutations, and combinations · Understand the influence of replacement and non-replacement 	