Tech Algebra II
District 2853

Month	Content	Performance Standards Addressed Grades 9-11 Grades 11-12		Skills for Student Achievement	Assessment
September	**Powers And Roots**	Algebra - Benchmarks #6, #11 Mathematical Reasoning - Benchmark #3 Computation & Operation - Benchmarks #1, #2 Patterns and Functions - Benchmarks #2, #4		· Expand powers · Evaluate roots · Convert to and from fractional exponents · Solve problems using powers, roots, and fractional exponents	Test/Quiz Formative Daily **Know and use Properties of Exponents**
October	**Applications of Geometry**	Patterns and Functions - Benchmark #2 Algebra - Benchmark #4 Geometry - Benchmark #3		· Solve problems using formulas · Rearrange and substitute into formulas to solve · Use Pythagorean Theorem to solve problems	Test/Quiz Formative Daily **Use Pythagorean Theorem to solve Problems**
November	**Linear Functions**	Patterns and Functions - Benchmarks #1, #3 Algebra - Benchmark #3		· Solve problems using Linear Equations · Find slope and intercept · Use slope intercept form	Test/Quiz Formative Daily
December	**Linear Functions**	Patterns and Functions - Benchmark #1 Algebra - Benchmarks #3, #7		· Use Cartesian coordinate plane · Graph $y = mx+b$; y = some number; x + some number; $x = o$, $y = o$ · Know the term origin	Test/Quiz Formative Daily
January and February	**Function Models**	Patterns and Functions - Benchmarks #1, #2, #3, #4		· Solve problems involving non-linear equations · Understand and use the following types of equations: quadratic, exponential, inverse, parabola, hyperbola, circle, ellipse, radical	Test/Quiz Formative Daily
February and March	**Statistics**	Data and Statistics - Benchmark #7		· 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	Test/Quiz Formative Daily **Model Real World Problems with Functions**

April	**Statistics**	Data and Statistics - Benchmarks #1, #2, #3, #4	Statistics - Benchmark #1	· 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	Test/Quiz Formative Daily **Use central tendency to make inferences**
May	**Probability**	Probability - Benchmark #1, #2, #4, #5, #6		· Solve probability problems using counting, permutations, and combinations · Understand the influence of replacement and non-replacement	Test/Quiz Formative Daily