

Eighth Grade –

- Children will communicate, model and represent an understanding of **numbers** and their relationships. They will explain estimation techniques, compare various computation techniques, and verify solutions with whole numbers, fractions, decimals, powers, and square roots. Children will also compute with ratios, proportions, and percents. They will solve real world problems using proportions and the decimal equivalents of percents.
- Children will increase their use of **geometric** vocabulary and notation. They will also explore spatial relationships using manipulative shapes. They will represent translations, rotations, and reflections on the coordinate plane, and learn to calculate area, perimeter and volume of geometric figures.
- Children will describe **measurement** processes using formulas, estimation, and comparative techniques with length, distance, weight, volume, area, capacity, time, and temperature. Manipulatives will help them explore shapes, areas, and perimeters as they use models to solve measurement problems.
- Children will identify **patterns** using manipulatives and numbers. They will demonstrate an understanding of **integers** as they continue their use of number lines and the coordinate plane. They will explore the functions of **algebra** and solve equations.
- Children will **represent and interpret numerical data** using charts, graphs, and tables. They will model probability, describe trends, and communicate generalities in both oral and written fashion. Their use of technology will help them display their results and further increase their understanding and awareness of probability. They will explore counting systems using three-attribute Venn diagrams.
- **Problem solving** should be the central focus of the math curriculum. Students will continue to explain in written detail the processes and results of their discoveries. They will use calculators, graphing calculators, spreadsheets, and other technologies to solve real-life problems.

Unit I – Exploring Patterns			
INSTRUCTIONAL OBJECTIVES	SUBJECT MATTER CONTENT	STANDARDS	ACTIVITIES
<p>The student should be able to:</p> <p>Recognize and describe number pattern. Use the form basic number operations. Evaluate powers and use square roots. Understand order of operations to simplify expressions that have grouping symbols, Evaluate expressions that contain variables and use formulas to model real-life situations. Use tables and graphs to organize data. Identify and discover properties of polygons. Use calculators and diagrams to discover number patterns and relate to real-life situations.</p>	<p>Number Patterns</p> <p>Number Operations</p> <p>Power and Square Roots</p> <p>Order of Operations</p> <p>Variable in Expressions</p> <p>Exploring Data</p> <p>Exploring Patterns in Geometry</p> <p>Exploring Patterns with Technology</p>	<p>4.1B, 4.1C, 4.3A, 4.3B, 4.3C, 4.3D, 4.2A, 4.4A, 4.5B, 4.5C, 4.5D, 4.5E, 4.5F</p>	<ul style="list-style-type: none"> ➤ Design a mathematical license plate using patterns ➤ All units in this course are taught by utilizing some or all of the following activities: <ol style="list-style-type: none"> a. Chalkboard demonstrations b. Lectures c. Classroom discussion d. Student demonstrations on the chalkboard e. Cooperative group activities f. Computer/calculator-related activities. g. smartboard activites

Unit II – Investigations in Algebra			
INSTRUCTIONAL OBJECTIVES	SUBJECT MATTER CONTENT	STANDARDS	ACTIVITIES
<p>The student should be able to:</p> <p>Use the distributive property.</p> <p>Simplify expressions by adding like terms.</p> <p>Simplify expressions in geometry.</p> <p>Check that a number is a solution of an equation.</p> <p>Use mental math.</p> <p>Use addition and subtraction to solve an equation and relate to real-life problems.</p> <p>Use multiplications and division to solve an equation and relate to real life problems.</p> <p>Use a spreadsheet to keep track of data.</p> <p>Translate verbal phrases into algebraic expression and model real life situations.</p> <p>Use a general problem solving plan.</p> <p>Solve simple inequalities and relate to real life problems.</p>	<p>Distributive Property</p> <p>Simplifying by Adding Like Terms</p> <p>Solving Equations with Mental Math</p> <p>Solving Equations through Addition and Subtraction</p> <p>Solving Equations through Multiplication and Division</p> <p>Modeling Verbal Expressions</p> <p>Real Life Modeling with Equations</p> <p>Problem Solving Plans</p> <p>Exploring Variable and Inequalities</p>	<p>4.1B, 4.1C, 4.3D, 4.5A, 4.5B</p>	<p>➤ Project: create a class power point, highlighting solving equations</p> <p>a. Chalkboard demonstrations.</p> <p>b. Lectures.</p> <p>c. Classroom discussion.</p> <p>d. Student demonstrations on the chalkboard.</p> <p>e. Cooperative group activities.</p> <p>f. Computer/calculator-related activities.</p> <p>g. smartboard activites</p>

Unit III – Modeling Integers			
INSTRUCTIONAL OBJECTIVES	SUBJECT MATTER CONTENT	STANDARDS	ACTIVITIES
<p>The student should be able to:</p> <p>Model integers on a number line.</p> <p>Find absolute value of a number.</p> <p>Use absolute value to add two integers.</p> <p>Use integers addition to solve real-life-problems.</p> <p>Add three or more integers.</p> <p>Simplify expressions by adding like terms.</p> <p>Use opposite to subtract integers.</p> <p>Simplify expressions involving subtraction.</p> <p>Multiply integers and relate to real life-problems.</p> <p>Divide integers and relate to real-life problems.</p> <p>Use a calculator to evaluate expressions involving integers.</p> <p>Use properties of equality to solve equations involving integers.</p> <p>Use integer operations to model real-life problems.</p> <p>Plot points in a coordinate plane.</p> <p>Use a coordinate plane to represent data graphically.</p>	<p>Integer and Absolute Value</p> <p>Adding Two Integers</p> <p>Adding Three or More Integers</p> <p>Subtracting Integers</p> <p>Multiplying Integers</p> <p>Dividing Integers</p> <p>Problem Solving Using Integers</p> <p>Exploring Patterns in the Coordinate Plane</p>	<p>4.1A, 4.1B, 4.3A, 4.3B, 4.3C, 4.5A, 4.5C, 4.5D</p>	<ul style="list-style-type: none"> ➤ Project: Design a golf course, using a rubric, students must design an 18 hole golf course, complete a scorecard with a final score of -1. ➤ All units in this course are taught by utilizing some or all of the following activities: <ol style="list-style-type: none"> a. Chalkboard demonstrations. b. Lectures. c. Classroom discussion. d. Student demonstrations on the chalkboard. e. Cooperative group activities. f. Computer/calculator-related activities. g. smartboard activites

Unit IV – Exploring the Language of Algebra			
INSTRUCTIONAL OBJECTIVES	SUBJECT MATTER CONTENT	STANDARDS	ACTIVITIES
<p>The student should be able to:</p> <p>Use two operations to solve two-step equations.</p> <p>Solve real-life problems using two-step equations.</p> <p>Use more than two operations to solve an equation.</p> <p>Solve real life problems using multi-step equation.</p> <p>Solve an equation by multiplying by a reciprocal.</p> <p>Use two-step equations to model real-life problems.</p> <p>Use the Distributive Property to solve equations, model and solve real-life problems.</p> <p>Solve equations with variables on both sides.</p> <p>Use equations to model problems in geometry.</p> <p>Use tables and graphs to solve real-life problems.</p> <p>Use a general problem solving plan.</p> <p>Round decimals while solving problems.</p> <p>Use a table to solve problems.</p> <p>Use simple geometric figures to estimate area and more complicated areas.</p>	<p>Exploring the Language of Algebra</p>	<p>4.2A, 4.3D, 4.5A, 4.5F</p>	<ul style="list-style-type: none"> ➤ Project: Start a business, students will create a business plan for a new business following a rubric. ➤ All units in this course are taught by utilizing some or all of the following activities: <ul style="list-style-type: none"> a. Chalkboard demonstrations. b. Lectures. c. Classroom discussion. d. Student demonstrations on the chalkboard. e. Cooperative group activities. f. Computer/calculator-related activities. g. smartboard activites

Unit V – Exploring Data and Graphs			
INSTRUCTIONAL OBJECTIVES	SUBJECT MATTER CONTENT	STANDARDS	ACTIVITIES
<p>The student should be able to:</p> <p>Read and make pictographs and time lines.</p> <p>Use bar graphs and histograms to represent data.</p> <p>Use a graphing calculator to make a histogram.</p> <p>Use line graphs to represent data and explore patterns in geometry.</p> <p>Choose and appropriate graph to represent data.</p> <p>Use graphs to make presentations.</p> <p>Recognize misleading pictographs and bar graphs.</p> <p>Recognize and correct misleading line graphs.</p> <p>Use line plots to organize data.</p> <p>Use organized data to help make decisions.</p> <p>Use data and graphs to solve real-life problems about advertising.</p> <p>Use scatter plots to see patterns in data and to help make decisions.</p> <p>Calculate the probability of an event.</p> <p>Use concepts of probability to solve real life problems.</p>	<p>Explore Pictographs and Time Lines</p> <p>Explore Bar Graphs and Histograms</p> <p>Explore Line Graphs</p> <p>Problems Solving – Choosing an Appropriate Graph</p> <p>Problem Solving – Misleading Graphs</p> <p>Statistics – Line Plots</p> <p>Statistics – Scatter Plots</p> <p>Explore Probability</p>	<p>4.3.B, 4.4.A, 4.4B, 4.5A, 4.5E</p>	<p>➤ Take a survey on a student created question. Make a graph of the results and display on a poster.</p> <p>➤ Instructional Activities</p> <p>All units in this course are taught by utilizing some or all of the following activities:</p> <p>a. Chalkboard demonstrations.</p> <p>b. Lectures.</p> <p>c. Classroom discussion.</p> <p>d. Student demonstrations on the chalkboard.</p> <p>e. Cooperative group activities.</p> <p>f. Computer/calculator-related activities.</p> <p>g. smartboard activites</p>

Unit VI – Exploring Number Theory			
INSTRUCTIONAL OBJECTIVES	SUBJECT MATTER CONTENT	STANDARDS	ACTIVITIES
<p>The student should be able to:</p> <p>Use divisibility test to factor natural numbers.</p> <p>Classify natural numbers as prime or composite.</p> <p>Factor integers and algebraic expressions.</p> <p>Find the greatest common factor of two numbers and two expressions.</p> <p>Find the least common multiple of two numbers.</p> <p>Use the least common multiple to solve problems in geometry.</p> <p>Simplify a fraction.</p> <p>Compare two fractions.</p> <p>Show that a number is rational.</p> <p>Write a decimal as a fraction.</p> <p>Evaluate powers that have negative and zero exponents.</p> <p>Multiply and divide powers.</p> <p>Use scientific notation to represent numbers and solve real-life problems.</p> <p>Use a calculator to evaluate expressions written in scientific notation.</p> <p>Recognize number patterns.</p> <p>Use a formula to predict numbers in a pattern.</p>	<p style="text-align: center;">Divisibility Tests</p> <p style="text-align: center;">Factors and Primes</p> <p style="text-align: center;">Greatest Common Factor</p> <p style="text-align: center;">Least Common Multiple</p> <p style="text-align: center;">Simplifying and Comparing Fractions</p> <p style="text-align: center;">Rational Numbers and Decimals</p> <p style="text-align: center;">Powers and Exponents</p> <p style="text-align: center;">Scientific Notation</p> <p style="text-align: center;">Exploring Patterns</p>	<p style="text-align: center;">4.1, 4.3.A 4.5F</p>	<ul style="list-style-type: none"> ➤ Use number theory concepts to solve problems that involve making a music recording. ➤ Instructional Activities: All units in this course are taught by utilizing some or all of the following activities: <ul style="list-style-type: none"> a. Chalkboard demonstrations. b. Lectures. c. Classroom discussion. d. Student demonstrations on the chalkboard. e. Cooperative group activities. f. Computer/calculator-related activities. g. smartboard activites

Unit VII– Rational Numbers and Percents			
INSTRUCTIONAL OBJECTIVES	SUBJECT MATTER CONTENT	STANDARDS	ACTIVITIES
<p>The student should be able to:</p> <p>Use rational numbers and percents to solve problems that involve making a plan.</p> <p>Add and subtract like fractions.</p> <p>Combine fractions by writing the fractions as decimals.</p> <p>Use addition and subtraction of decimals to solve real-life problems.</p> <p>Multiply and divide rational numbers.</p> <p>Write percents as decimals and write decimals as percents.</p> <p>Write fractions as percents and write percents as fractions.</p> <p>Find a percent of a number.</p> <p>Use percents to help organize data.</p>	<p>Addition and Subtraction of Like Fractions</p> <p>Addition and Subtraction of Unlike Fractions</p> <p>Exploring Fractions and Decimals</p> <p>Multiplication of Rational Numbers</p> <p>Division of Rational Numbers</p> <p>Exploring Percents</p> <p>Percents, Decimals and Fractions</p> <p>Finding a Percent of a Number</p> <p>Problem Solving With Percents</p>	<p>4.1A, 4.1B</p> <p>4.5A</p>	<p>➤ Project: create a catalog of 20 items, create a discount shopping guide, find new prices using percent proportion. (rubric)</p> <p>➤ Instructional Activities: All units in this course are taught by utilizing some or all of the following activities:</p> <ol style="list-style-type: none"> a. Chalkboard demonstrations. b. Lectures. c. Classroom discussion. d. Student demonstrations on the chalkboard. e. Cooperative group activities. f. Computer/calculator-related activities. g. smartboard activites

Unit VIII – Proportion, Percent and Probability			
INSTRUCTIONAL OBJECTIVES	SUBJECT MATTER CONTENT	STANDARDS	ACTIVITIES
<p>The student should be able to:</p> <p>Use proportion, percents and the Counting Principle to solve real-life problems.</p> <p>Find rates and rations.</p> <p>Solve and write proportions for similar triangles.</p> <p>Use similar triangles to measure objects indirectly.</p> <p>Solve percent equations.</p> <p>Find what percent one number is of another.</p> <p>Use problem solving to solve percent problems.</p> <p>Find a percent of increase or decrease.</p> <p>Use Pascal’s Triangle to count the number of ways an event can happen.</p> <p>Compare theoretical and experimental probabilities of compound events (dependent and independent).</p>	<p>Exploring Rates and Ratios</p> <p>Solving Proportions</p> <p>Problem Solving Using Proportions</p> <p>Solving Percent Equations</p> <p>Problem Solving Using Percents</p> <p>Exploring Percent of Increase or Decrease</p> <p>The Counting Principle.</p> <p>Probability and Simulations</p>	<p>4.1A, 4.4B</p>	<ul style="list-style-type: none"> ➤ Project: Dream date ➤ Activity: using the shadows created by the sun, find the height of objects in the school yard. ➤ All units in this course are taught by utilizing some or all of the following activities: <ul style="list-style-type: none"> a. Chalkboard demonstrations. b. Lectures. c. Classroom discussion. d. Student demonstrations on the chalkboard. e. Cooperative group activities. f. Computer/calculator-related activities. g. smartboard activites

Unit IX – Exploring Number Theory			
INSTRUCTIONAL OBJECTIVES	SUBJECT MATTER CONTENT	STANDARDS	ACTIVITIES
<p>The student should be able to:</p> <p>Use the properties of real numbers and inequalities to solve real-life problems.</p> <p>Solve equations whose solutions are square roots.</p> <p>Represent real numbers with a number line.</p> <p>Classify real numbers as rational or irrational.</p> <p>Use the Pythagorean Theorem, to solve a right triangle and measure indirectly.</p> <p>To use a calculator to approximate square roots.</p> <p>Write equivalent inequalities.</p> <p>Graph and inequality.</p> <p>Use algebra to solve real-life problems.</p> <p>Use multiplication and division to solve inequalities.</p> <p>Solve multi-step inequalities.</p>	<p>Exploring Square Roots</p> <p>The Real Number System</p> <p>The Pythagorean Theorem</p> <p>Problem Solving Using the Pythagorean Theorem</p> <p>Graphing Inequalities</p> <p>Solving Inequalities – Multiply and Dividing</p> <p>Solving Multi-Step Inequalities</p> <p>The Triangle Inequality</p>	<p>4.1A, 4.1B, 4.2.A 4.3B</p>	<ul style="list-style-type: none"> ➤ Create a picture book, detailing properties of numbers ➤ All units in this course are taught by utilizing some or all of the following activities. <ul style="list-style-type: none"> a. Chalkboard demonstrations. b. Lectures. c. Classroom discussion. d. Student demonstrations on the chalkboard. e. Cooperative group activities. f. Computer/calculator-related activities. g. smartboard activites

Unit XI – Geometry Concepts Of Spatial Thinking			
INSTRUCTIONAL OBJECTIVES	SUBJECT MATTER CONTENT	STANDARDS	ACTIVITIES
<p>The student should be able to:</p> <p>Explore points, lines, planes. Describe real-life objects. Naming, measuring and drawing angles. Explore parallel lines and the angles formed when they are intersected by a third line. Solve real-life problems. Identify lines of symmetry. Classify triangles by their sides and angles. Identify quadrilaterals in diagrams and real-life situations. Recognize congruent polygons/ Identify regular polygons. Identify interior and exterior angles of a polygon and find their measures. Use geometry to solve real-life problems. Use computer drawing programs to discover properties of polygons. Compare lengths and angle measure of triangles. Find angles measures of isosceles triangles.</p>	<p>Explore Points, Lines, Planes</p> <p>Name, Measure and Draw Angles</p> <p>Explore Parallel Lines</p> <p>Identify Lines of Symmetry</p> <p>Explore Triangles</p> <p>Explore Quadrilaterals</p> <p>Polygons and Congruence</p> <p>Angles of Polygons</p> <p>Angle and Side Relationship</p>	<p>4.2A, 4.2B 4.2D, 4.2E</p>	<p>➤ Design a quilt square</p> <p>➤ All units in this course are taught by utilizing some or all of the following activities. Use number theory concepts to solve problems that involve making a music recording.</p> <p>a. Chalkboard demonstrations.</p> <p>b. Lectures.</p> <p>c. Classroom discussion.</p> <p>d. Student demonstrations on the chalkboard.</p> <p>e. Cooperative group activities.</p> <p>f. Computer/calculator-related activities.</p> <p>g. smartboard activites</p>

Unit XI – Congruence, Similarity and Transformations			
INSTRUCTIONAL OBJECTIVES	SUBJECT MATTER CONTENT	STANDARDS	ACTIVITIES
<p>The student should be able to:</p> <p>Find areas of parallelograms and trapezoids. Determine congruency. Reflect a figure on a line. Describe a rotation about a point. Rotate of figure in coordinate plane. Represent translations in a coordinate plane. Recognize similar figures and use their properties. Compare perimeters and areas of similar figures. Find trigonometric ratios. Use Pythagorean Theorem to find trigonometric ratios. Use a calculator to evaluate trigonometric ratios. Use trigonometric ratios to solve right triangles. Use geometric concepts to solve real-life problems.</p>	<p>Area and Perimeter</p> <p>Explore Congruence</p> <p>Line Reflections</p> <p>Rotations</p> <p>Translations</p> <p>Explore Similarity</p> <p>Solve Problems Using Similar Figures</p> <p>Trigonometric Ratios</p> <p>Solve Problems Using Trigonometric Ratios</p>	<p>4.2A, 4.2B 4.2C, 4.2D, 4.2E, 4.4D</p>	<ul style="list-style-type: none"> ➤ Translation activity ➤ Design a mall ➤ All units in this course are taught by utilizing some or all of the following activities. Use number theory concepts to solve problems that involve making a music recording. <ul style="list-style-type: none"> a. Chalkboard demonstrations. b. Lectures. c. Classroom discussion. d. Student demonstrations on the chalkboard. e. Cooperative group activities. f. Computer/calculator-related activities. g. smartboard activites

Unit XII – Measurements in Geometry			
INSTRUCTIONAL OBJECTIVES	SUBJECT MATTER CONTENT	STANDARDS	ACTIVITIES
<p>The student should be able to:</p> <p>Find circumference and area of a circle with and without calculators.</p> <p>Build and describe polyhedrons</p> <p>Identify and draw solids.</p> <p>Find surface area of a prism and a cylinder.</p> <p>Find the volume of a pyramid and a cone.</p> <p>Find the volume of a sphere.</p> <p>Find complicated volumes.</p> <p>Explore ratios of similar figures.</p> <p>Use ratios of similar figures.</p> <p>Use measurements and geometry to solve real-life problems that involve physical concepts.</p>	<p>Explore Diameter and Circumference</p> <p>Explore Polyhedrons and Other Solids</p> <p>Explore Surface Area of Prisms and Cylinders</p> <p>Explore Volumes of Prisms</p> <p>Explore Volumes of Cylinders</p> <p>Explore Volumes of Pyramids and Cones</p> <p>Explore Volumes of Spheres</p> <p>Explore Similar Solids</p>	<p>4.2A, 4.2E</p>	<ul style="list-style-type: none"> ➤ Mathematician happy meal project, students create a happy meal box, find surface area and volume, while finding information on a mathematician ➤ All units in this course are taught by utilizing some or all of the following activities. Use number theory concepts to solve problems that involve making a music recording. <ul style="list-style-type: none"> a. Chalkboard demonstrations. b. Lectures. c. Classroom discussion. d. Student demonstrations on the chalkboard. e. Cooperative group activities. f. Computer/calculator-related activities. g. smartboard activities

Unit XIII – Exploring Linear Equations			
INSTRUCTIONAL OBJECTIVES	SUBJECT MATTER CONTENT	STANDARDS	ACTIVITIES
<p>The student should be able to:</p> <p>To find solutions of a linear equation with two variables. To organize solutions of linear equations in real-life situations.</p> <p>To use a table of values to sketch the graph of a linear equation. To recognize graphs of horizontal and vertical lines. To use a graphing calculator to graph equations.</p> <p>To find intercepts of lines. To use intercepts to sketch quick graphs.</p> <p>To use linear equations to solve real-life problems.</p> <p>To find the slope and y-intercept of a line from its equation. To use the slope-intercept form to sketch a quick graph.</p> <p>To use graphs of linear equations to model real-life situations. To use a scatter plot and a line of fit to make predictions from data.</p> <p>To check whether an ordered pair is a solution of a linear inequality. To sketch the graph of a linear inequality.</p> <p>To find the distance between two points. To find the midpoint of a line segment.</p>	<p>Solving Linear Equations With Two Variables</p> <p>Tables to Organize Results Real-life Application</p> <p>Graphing Linear Equations</p> <p>Number Patterns</p> <p>Linear Equation Form for Horizontal and Vertical Lines</p> <p>X-Intercepts and Y-Intercepts</p> <p>Quick Graphing of Two Solutions of an Equation</p> <p>Cable Cars Real-Life Problem</p> <p>Exploring Positive, Negative and Zero Slopes of Two Lines</p> <p>Different Form of Linear Equation: Slope Intercept Form</p> <p>Linear Relationships Scatter Plots</p> <p>Graphing Solutions To Linear Inequalities</p> <p>Using Graphs Of Linear Inequalities To Solve Real-Life Problems</p>	<p>4.2C, 4.3A, 4.3B, 4.3C, 4.3D</p>	<p>➤ Barbie doll bungee</p> <p>➤ All units in this course are taught by utilizing some or all of the following activities. Use number theory concepts to solve problems that involve making a music recording.</p> <p>a. Chalkboard demonstrations.</p> <p>b. Lectures.</p> <p>c. Classroom discussion.</p> <p>d. Student demonstrations on the chalkboard.</p> <p>e. Cooperative group activities.</p> <p>f. Computer/calculator-related activities.</p> <p>g. smartboard activities</p>

Unit XIV – Exploring Linear Equations

INSTRUCTIONAL OBJECTIVES	SUBJECT MATTER CONTENT	STANDARDS	ACTIVITIES
<p>The student should be able to:</p> <p>To find measures of central tendency. To use measures of central tendency to solve real-life problems.</p> <p>To organize data with a stem-and-leaf plot to compare sets of data.</p> <p>To organize data with a box-and-whisker plot. To use box-and-whisker plots to interpret real-life data.</p> <p>To use a graphing calculator to sketch box-and-whisker plots.</p> <p>To organize data with a matrix. To add and subtract two matrices.</p> <p>To use statistics to solve real-life problems.</p> <p>To identify polynomials and write them in standard form. To use polynomials to solve real-life problems.</p> <p>To add and subtract two or more polynomials.</p>	<p>Using the Distance Formula</p> <p>Using the Midpoint Formula</p> <p>Use Both Formulas to Solve Real-Life Problems</p> <p>Mean, Median, Mode</p> <p>Interpreting Mean, Median, Mode of Data</p> <p>Interpreting Real-Life Data Organized in a Stem-and-Leaf Plots</p> <p>First, Second, Third Quartiles</p> <p>Interpreting Real-Life Data</p> <p>Practice Using a Graphing Calculator</p> <p>Creating a Collection of Numbers that Corresponds to a Given Box-and-Whisker Plot</p>	<p>4.1A, 4.3A, 4.4A, 4.5E, 4.5F</p>	<ul style="list-style-type: none"> ➤ Duplicate Galileo’s “Inclined Plane” experiment. ➤ All units in this course are taught by utilizing some or all of the following activities. Use number theory concepts to solve problems that involve making a music recording. <ul style="list-style-type: none"> a. Chalkboard demonstrations. b. Lectures. c. Classroom discussion. d. Student demonstrations on the chalkboard. e. Cooperative group activities. f. Computer/calculator-related activities. g. smartboard activites

Unit XIV – Exploring Linear Equations

INSTRUCTIONAL OBJECTIVES	SUBJECT MATTER CONTENT	STANDARDS	ACTIVITIES
<p>The student should be able to:</p> <p>To multiply a polynomial by a monomial. To use polynomial multiplication to solve geometry problems.</p> <p>To multiply a binomial by a binomial. To use polynomial multiplication to solve real-life problems.</p>	<p>Creating a Matrix</p> <p>Equal and Unequal Matrices</p> <p>Adding or Subtracting Matrices</p> <p>Organizing and Interpreting Real-Life Data From an Ultra race</p> <p>Writing Monomials, Binomials and Trinomials in Standard Form</p> <p>Using a Polynomial to Analyze a Real-Life Situation</p> <p>Use Algebra Tiles to Represent Polynomials and Then Add or Subtract Them</p> <p>Degrees of a Polynomial</p> <p>Multiplying Polynomials</p> <p>Distributive Property</p> <p>Property of Exponents</p> <p>Using Polynomial Multiplication to Find the Area of a Region</p> <p>Using the Horizontal and Vertical Forms to Multiply Polynomials</p> <p>Using the FOIL Method to Multiply Binomials</p> <p>Using Polynomial Multiplication to Find the Dimensions of a Picture Frame</p>	<p>4.1A, 4.1B, 4.3A, 4.3C, 4.3D, 4.4A, 4.5F</p>	<ul style="list-style-type: none"> ➤ Duplicate Galileo’s “Inclined Plane” experiment. ➤ All units in this course are taught by utilizing some or all of the following activities. Use number theory concepts to solve problems that involve making a music recording. <ul style="list-style-type: none"> a. Chalkboard demonstrations. b. Lectures. c. Classroom discussion. d. Student demonstrations on the chalkboard. e. Cooperative group activities. f. Computer/calculator-related activities.