

Standards and Benchmarks for Math—2002

Farragut Community School

	Number and Operation	Data Analysis and Probability	Measurement	Algebra	Geometry
E x p e c t a t i o n	<p>Instructional programs should enable all students to:</p> <ol style="list-style-type: none"> 1) understand numbers, ways of representing numbers, relationships among numbers, and number systems 2) understand meanings of operations and how they relate to one another; and 3) compute fluently and make reasonable estimates. 	<p>Instructional programs should enable all students to:</p> <ol style="list-style-type: none"> 1) formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them; 2) select and use appropriate statistical methods to analyze data; 3) develop and evaluate inferences and predictions that are based on data; and 4) understand and apply basic concepts or probability. 	<p>Instructional programs should enable all students to:</p> <ol style="list-style-type: none"> 1) understand measurable attributes of objects and the units, systems, and processes of measurement and 2) apply appropriate techniques, tools, and formulas to determine measurements. 	<p>Instructional programs should enable all students to:</p> <ol style="list-style-type: none"> 1) understand patterns, relations, and functions; 2) represent and analyze mathematical situations and structures using algebraic symbols; 3) use mathematical models to represent and understand quantitative relationships; and 4) analyze change in various contexts. 	<p>Instructional programs should enable all students to:</p> <ol style="list-style-type: none"> 1) analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships; 2) specify locations and describe spatial relationships using coordinate geometry and other representational systems; 3) apply transformations and use symmetry to analyze mathematical situations; and 4) use visualization, spatial reasoning, and geometric modeling to solve problems.
K	<p>Understands numbers, ways of representing numbers, relationships among numbers, and number systems.</p> <ul style="list-style-type: none"> • Count to 100 • Write numbers to 31 • Construct sets to 31 through the use of manipulatives • Recognize numbers to 31 • Basic whole number relationships using words "less than, greater than, equal to" and sequencing • Solve a simple addition problem to sums of ten (with manipulatives) • Solve a simple subtraction problem from ten or less (with manipulatives) • Apply and adapt a variety of appropriate strategies to solve problems 	<p>Demonstrates the ability to collect, compare, and display data using manipulatives.</p> <ul style="list-style-type: none"> • Sorts objects by specified attributes. • Read and interpret developmentally appropriate graphs and charts. 	<p>Understands measurable attributes of objects and the units, systems, and processes of measurement.</p> <ul style="list-style-type: none"> • Verbally tell time to the hour. • Write time to hour (6:00). • Identify a penny. • Identify a nickel. • Identify a dime. • Use nonstandard units to measure and compare. • Compare measurement attributes of objects (longer, shorter, bigger, smaller, warmer, colder). 	<p>Understands simple patterns.</p> <ul style="list-style-type: none"> • Recognize and construct simple patterns. 	<p>Understands simple (2-D) shapes.</p> <ul style="list-style-type: none"> • Name, draw, sort, and compare basic shapes • Recognize shapes and patterns are all around us

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1	<p>Understands and applies advanced concepts of numbers.</p> <ul style="list-style-type: none"> Write numbers to 100. Identify numbers before, after, between Read number words to 10. Recognize a whole and parts of a whole Count by 2's to 20 Count by 5's to 100 Count by 10's to 100. Recognize and use ordinal numbers to 10 Demonstrate place value of tens and ones. Apply, adapt, and demonstrate a variety of appropriate strategies to solve problems. <p>Understands addition and subtraction operations and how they relate to each other.</p> <ul style="list-style-type: none"> Adds sums through ten Subtracts from ten 	<p>Demonstrates the ability to create, read, and interpret simple graphs.</p> <ul style="list-style-type: none"> Sort and classify objects. Draw and/or read various graphs (bar, picture, etc.) 	<p>Understands measurable attributes of objects and the units, systems, and processes of measurement.</p> <ul style="list-style-type: none"> Verbally tell time to the half-hour. Write time to the half-hour (6:30) Tell value of penny. Tell value of nickel. Tell value of dime. Measure length using a variety of units (paper clips, cubes, inches, cm, etc.) Estimate length using a variety of units. 	<p>Understands general principle of properties of addition and subtraction.</p> <ul style="list-style-type: none"> Demonstrate commutative property of addition. Recognize the addition and subtraction relationship of fact families Recognize, construct, and extend simple patterns 	<p>Understands spatial relationships of objects.</p> <ul style="list-style-type: none"> Identify plane shapes that make up 3-D shapes Recognize shapes and patterns in our environment.

2	<p>1) Understands and applies basic and advanced properties of the concepts of numbers.</p> <ul style="list-style-type: none"> Demonstrate place value of 1's, 10's, and 100's Compare numbers using the symbols $>$, $<$, $=$ Recognize, count and write numbers to 1,000 Choose fractional names to represent fractional parts. Recognize odd and even numbers. Order a set of numbers from 0 – 99. <p>2) Understands addition and subtraction while using a variety of methods and tools to compute (including objects, mental computation, estimation, paper and pencil, and calculators).</p> <ul style="list-style-type: none"> Round numbers to nearest 10. Add and subtract to/from 18. Add three single-digit numbers. Add and subtract any two-digit number (with or without regrouping/trading). Solves real-world problems using various strategies. 	<p>1) Demonstrates the ability to collect, organize and interpret data for visual display.</p> <ul style="list-style-type: none"> Interpret and/or construct a pictograph. Interpret and/or construct a bar graph. Tally information Makes observations about a graph. <p>2) Understands basic concepts of probability.</p> <ul style="list-style-type: none"> Describes the likelihood of an event. Predict the outcome of a probability experiment. 	<p>Uses appropriate tools and techniques to determine measurements (including money, time, and linear measure.)</p> <ul style="list-style-type: none"> Verbally tell time to five-minute interval. Write time to fifteen-minute intervals using proper notation. Identify the value of a collection of coins to \$1.00 Write money amounts using ¢ and $\text{\\$}$. Measure using inch and centimeter rulers. Recognize and apply days, months, weeks and year. Measure and compare volume, weight and temperature. 	<p>Demonstrates the ability to create, extend, and explain a simple pattern.</p> <ul style="list-style-type: none"> Ability to continue a pattern using objects or numbers. Skip count by 2s, 5s, 10s from any number with the use of manipulatives <p>Understands basic addition or subtraction equations with a missing element.</p> <ul style="list-style-type: none"> Write addition and subtraction fact families. Represents or models the basic equation with a missing element. 	<p>Understands the characteristics of 2 and 3 dimensional shapes.</p> <ul style="list-style-type: none"> Recognize pyramids, cylinders, cones, spheres and rectangular solids <p>Understands that geometric shapes can be observed in the real world (recognize and specify location).</p> <ul style="list-style-type: none"> Identify lines of symmetry in the world around them. Recognize congruent shapes.
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3	<p>Demonstrate ability to compute sums and differences of whole numbers and decimals using money.</p> <ul style="list-style-type: none"> • add three-digit numbers with or without regrouping • subtract three-digit numbers with or without regrouping • add money sums to \$100. • subtract money from \$100. <p>Understands multiplication and division.</p> <ul style="list-style-type: none"> • Demonstrate multiplication and division families from 0-9 using manipulatives <p>Understands numbers, ways of representing numbers, relationships among numbers, and number systems.</p> <ul style="list-style-type: none"> • read & write numbers to 9999 • name place value to 10,000 • compare 4 digit numbers using < , > , = • read and write numbers from word form to standard form and vice-versa • round numbers to the nearest 100 <p>Understands fractional concepts.</p> <ul style="list-style-type: none"> • determine half of even numbers • know that a fraction means part of a whole or a set of items 	<p>Understands tables and graphs through problem solving (including simple predictions).</p> <ul style="list-style-type: none"> • Read and interpret graphs or tables to answer questions • Use a key to read a graph or chart • Construct a picture graph with a key from given specific information • Create/complete a table or horizontal graph given specific information • Use basic problem solving strategies (ie guess & check, make a chart, draw a picture, identify pertinent information, estimate, and label answer, act out) 	<p>Understand measurable attributes of objects and use appropriate techniques and tools to measure length, weight, temperature, money, and time.</p> <ul style="list-style-type: none"> • determine “weeks from” “weeks until”, “days from”, and “days until” • recite months and days in order • tell time to the nearest minute • write time to the five minute intervals using proper notation • tell time before and after the hour • use terms “half-past, quarter after, quarter till” • count money using quarters, dimes, nickels, and pennies • write and read value of money to \$9.99 • make change to one dollar • measure to the nearest one-half inch • measure to the nearest centimeter • write the vocabulary for linear measurement in the standard measurement system including abbreviations • name measurement tools (ruler, yardstick, meter stick, scale, thermometer) 	<p>Understand patterns, functions, and relations.</p> <ul style="list-style-type: none"> • continue a numerical pattern generated by skip counting with 2,3,5,and 10 or simple counting rules • supply a missing number in a number sentence with one or two digit numbers 	<p>Understands characteristics of two dimensional shapes.</p> <ul style="list-style-type: none"> • recognize and draw triangles and quadrilaterals. <p>Recognize and name lines, line segments, horizontal lines, and vertical lines</p>

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<p style="text-align: center; font-size: 2em; font-weight: bold;">4</p>	<p>Understands fractions</p> <ul style="list-style-type: none"> Identify numerators and denominators Write a fraction to identify a portion of a set or object Write equivalent fractions for $\frac{1}{4}$, $\frac{1}{2}$, and 1 Add and subtract fractions with like denominators Represents fractions with models <p>Understands numbers, ways of representing numbers, relationships among numbers, and number systems.</p> <ul style="list-style-type: none"> Read, write, compare, & order numbers to the hundred thousands place Know the terms value, expanded form and standard form <p>3) Demonstrate ability to compute sums, differences, products, and quotients of whole numbers.</p> <ul style="list-style-type: none"> Add and subtract whole numbers Know multiplication and division families from 0-9 (includes 9x9) Multiply 2-digit by 1-digit numbers with or without regrouping Divide 3-digit by 1-digit numbers with remainders Use estimation in problem solving Apply appropriate strategies for problem solving 	<p>Demonstrates the ability to represent data in a variety of formats (including tables and graphs).</p> <ul style="list-style-type: none"> Choose topic, collect (by surveys, observations, or experiments), and organize data using visual displays for analysis Apply probability to a given situation (ex. Certain, equally likely, impossible) 	<p>Understand measurement using standard units in the customary and metric systems.</p> <ul style="list-style-type: none"> Determine the amount of change to be received from a purchase not to exceed \$20.00 Calculate area of squares and rectangles Calculate perimeter of polygons write the vocabulary of the metric measurement system including abbreviations identify correct unit of measurement including abbreviations and symbols for length, weight, capacity and temperature calculate volume of rectangular shapes <p>Use appropriate tools and technology for measurement.</p> <ul style="list-style-type: none"> Read scales (ex: thermometer, calendar, odometer, ruler) Determine appropriate tool to measure a given object 	<p>Understand and analyze mathematical situations using algebraic symbols.</p> <ul style="list-style-type: none"> Repeats and extends patterns Represents the idea of a variable as an unknown using a letter or symbol. 	<p>Understands characteristics of two and three-dimensional shapes.</p> <ul style="list-style-type: none"> Classify polygons by number of sides (i.e. triangles, rectangles etc.) Classify angles (i.e. right, obtuse, acute) Identify three-dimensional shapes (i.e. prism, cone, pyramid, cube, cylinder, sphere) <p>Understands characteristics of lines</p> <ul style="list-style-type: none"> Identify lines, rays and line segments Classify lines as parallel, perpendicular or intersecting Identify congruent, similar, and symmetrical figures
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5	<p>Understands numbers, ways of representing numbers, relationships among numbers, and number systems.</p> <ul style="list-style-type: none"> • Read and write place value to millions • Compare, order and round whole numbers • Read and write decimal place value to thousandths <p>Understands fractional concepts</p> <ul style="list-style-type: none"> • Find equivalent fractions • Write fractions in simplest form • Compare fractions <p>Understands meaning of operations and how they relate to one another.</p> <ul style="list-style-type: none"> • Understands multiples of 10 • Uses rules of divisibility (2, 5, 10) • Understands the relationship between inverse operations <p>Demonstrates computation and estimation skills.</p> <ul style="list-style-type: none"> • Add and subtract like fractions • Add and subtract mixed numbers with like denominators (no regrouping) • Use rounding to estimate sums and differences of whole numbers • Use rounding to estimate sums and differences of decimals • Add and subtract decimals • Estimate products • Multiply by three-digit numbers • Estimate quotients of whole numbers • Divide by one and two digit divisors • Divide with a zero in the quotient 	<p>Understands averaging given relevant data.</p> <ul style="list-style-type: none"> • Calculate mean <p>Demonstrates the ability to analyze data by expanding models of representation.</p> <ul style="list-style-type: none"> • Uses tables, charts, and graphs to interpret and analyze data • Understands prediction and probability outcomes 	<p>Demonstrates the ability to make simple unit conversions within a system of measurement.</p> <ul style="list-style-type: none"> • Understands attributes of length, area, weight, volume, and angle size • Selects appropriate type of unit for measuring each attribute • Carries out simple unit conversions as in inches to feet • Carries out simple unit conversions within the metric system (milli, centi, kilo, unit) <p>Demonstrates appropriate techniques, tools, and formulas to determine measurements.</p> <ul style="list-style-type: none"> • Understands problem solving concepts involving elapsed time • Calculate perimeter and area of simple polygons • Calculate volume of rectangular solids 	<p>Understands mathematical situations and structures using algebraic symbols.</p> <ul style="list-style-type: none"> • Identifies properties (commutative, associative, and distributive). • Uses properties to compute with whole numbers • Solve number sentences involving addition and subtraction with one variable 	<p>Understands characteristics of geometric shapes and geometric relationships.</p> <ul style="list-style-type: none"> • Identifies congruent, similar, and symmetrical figures • Identifies parts of a circle

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6	<p>Understands meanings of operations and how they relate to one another.</p> <ul style="list-style-type: none"> Understands "standard order rules" for order of operations. Identify commutative, associative, distributive, and identity properties. <p>Demonstrates the ability to compute sums and differences of fractions with unlike denominators.</p> <ul style="list-style-type: none"> Compute the sum and difference of simple fractions. Compute the sum and difference of mixed numbers. <p>Understands properties of decimals.</p> <ul style="list-style-type: none"> Identifies the place value to the hundred-thousandths place. Compute the product and quotient of a decimal to the nearest hundred thousandths. Order, compare, and round decimals to the nearest hundredths 	<p>Demonstrate ability to collect and organize relevant data.</p> <ul style="list-style-type: none"> Identify information necessary to complete the appropriate graph <p>Demonstrate ability to display information collected and interpret information.</p> <ul style="list-style-type: none"> Identify and construct bar and line graphs Identify a circle graph(i.e. pie charts) <p>Demonstrate ability to compute mean, median, mode, and range.</p>	<p>Understands role of estimation in measuring.</p> <ul style="list-style-type: none"> Identify correct unit of measure (capacity, length, mass). Uses the correct tool for measuring length and angles. Convert units of customary and metric measure. Understand relationships between customary and metric units. <p>Understand, select and use appropriate size and type of unit to measure perimeter and area. Identify the correct unit needed in labeling (units, square units)</p> <p>Develop and use formulas to determine the circumference of circles and the area of triangles, parallelograms, trapezoids, and circles</p>	<p>Understand and compare ways of representing patterns (including tables, graphs, symbols and words).</p> <ul style="list-style-type: none"> Identify first quadrant coordinates of a graph. Solve one-step whole number equations using all four operations. Identify simple patterns using variables. 	<p>Understand characteristics of properties of basic 2-D and 3-D shapes</p> <ul style="list-style-type: none"> Classify polygons based on a variety of characteristics (i.e. sides, angles) build 3-D shapes using 2-D shapes <p>Demonstrates the use of pi as the circumference divided by the diameter</p>
7	<p>1) Understands meanings of operations and how they relate to one another.</p> <ul style="list-style-type: none"> Follow order of operations to solve expressions Understands prime and composite numbers Applies all rules of divisibility. Simplifies computations with whole numbers, fractions, and decimals using associative, commutative, and distributive properties <p>2) Understands and computes fractions</p> <ul style="list-style-type: none"> Compare and order fractions with unlike denominators. Represent fractions with models. Multiplies and divides fractions. 	<p>Understands and demonstrates inferences and predictions that are based on data.</p> <ul style="list-style-type: none"> Develop questions about a given set of data Plot data Make conjectures about the relationships between the data <p>Demonstrate an understanding of measures of central tendency.</p> <ul style="list-style-type: none"> Find the mean, median, mode, and range for a set of data Recognize how a new data item will affect measures of central tendency <p>Understands that probability can be represented as a fraction</p> <ul style="list-style-type: none"> Recognize all probabilities range from zero to one Identify the parts of a probability fraction 	<p>Understand conversions and ratios between units in a system.</p> <ul style="list-style-type: none"> Convert measurements between all prefix and base unit for meters, liters, and grams Convert measurements between fluid ounces, cups, pints, quarts, and gallons; inches, feet, yards, and miles; ounces, pounds, and tons Convert measurements between seconds, minutes, hours, days, weeks, months, and years <p>Uses appropriate units of measure when solving problems.</p> <ul style="list-style-type: none"> Apply formulas to determine the circumference of circles and the area of triangles, parallelograms, trapezoids, and circles develop strategies to determine the surface areas and volume of selected prisms, pyramids, and cylinders Measures angles 	<p>Demonstrates the ability to solve one-step whole number equations.</p> <ul style="list-style-type: none"> Solve addition and subtraction equations using inverse operations. Solve multiplication and division equations using inverse operations. <p>Understand the coordinate plane.</p> <ul style="list-style-type: none"> Identify a given point using an ordered pair. Graph a given point. 	<p>1) Understand coordinate geometry.</p> <ul style="list-style-type: none"> Draw on a coordinate plane: parallelograms, triangles <p>2) Understand relationships among types of two-dimensional objects using their defining properties</p> <ul style="list-style-type: none"> Compare and contrast the properties of quadrilaterals and various types of triangles. Classify angles based on angle measure

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8	<p>Demonstrate ability to compute using addition and multiplication properties and order of operations with whole numbers, rational numbers and integers.</p> <ul style="list-style-type: none"> • Computes using the 4 basic operations with rational numbers. • Simplifies powers, exponents, and square roots. • Uses order of operations to simplify expressions. • Find equivalent forms of decimals, fractions, and percents. 	<p>Use various tools to organize and interpret data</p> <ul style="list-style-type: none"> • Creates, reads, and interprets various kinds of graphs (i.e., histograms, line graphs, stem and leaf plots, box-and-whisker plots) • Identify and use measures of central tendencies (mean, median, mode). <p>Demonstrate an understanding of probability.</p> <ul style="list-style-type: none"> • Find the probability of one or more events. 	<p>Understand conversions and relationships within systems.</p> <ul style="list-style-type: none"> • Converts units of length, capacity and mass in customary and metric systems. <p>Uses tools and techniques for determining area and volume.</p> <ul style="list-style-type: none"> • Find the area of various types of 2-dimensional figures. • Find the surface area and volume of prisms • Find the volume of cylinders. 	<p>Demonstrate the ability to solve linear equations.</p> <ul style="list-style-type: none"> • Solve one-step equations using rational numbers. • Solve two-step equations with one variable term (i.e., $3x-2=34$). <p>Demonstrates the ability to translate common language into algebraic form.</p> <p>Write simple algebraic expressions and equations from verbal phrases.</p>	<p>Applies geometric properties in order to solve problems.</p> <ul style="list-style-type: none"> • Use proportions to solve problems involving similar figures. • Demonstrate the use of the Pythagorean Theorem to find the lengths of sides of right triangles.

P R E - A L G E B R A	<p>Demonstrates the ability to model/represent fractions, decimals and percents and the relationship among them.</p> <ul style="list-style-type: none"> • Convert between forms • Understand basic percent problems • Uses rates of interest • Models/represents each graphically <p>Understands and demonstrates different strategies in solving word problems.</p> <ul style="list-style-type: none"> • Work a simpler problem • Being able to translate from English phrases and sentences to algebraic expressions and equations • Uses order of operations 	<p>Use various methods to interpret and display data and make predictions.</p> <ul style="list-style-type: none"> • Stem and leaf plots • Line graph • Bar graph • Circle graph • Find the probability of one or more events <p>Understands appropriate statistical methods to analyze data.</p> <ul style="list-style-type: none"> • Applies measures of central tendency • Applies measures of variation 	<p>Measure and/or estimate using appropriate units of length, weight, mass, and capacity.</p> <ul style="list-style-type: none"> • Temperature • Capacity • Linear measurement • Area • Mass 	<p>Demonstrates the ability to solve linear equations.</p> <ul style="list-style-type: none"> • Solve one-step and two-step equations with one variable term. • Translates common language into algebraic form. <p>Write simple algebraic expressions and equations from verbal phrases.</p>	<p>Uses coordinate geometry to examine basic transformations.</p> <ul style="list-style-type: none"> • Translations
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<p style="text-align: center;">A L G E B R A 1</p>	<p>Demonstrates computational fluency with whole numbers, decimals, integers, and rational numbers.</p> <ul style="list-style-type: none"> Recognizes and applies the applications of the properties of real numbers <p>Demonstrates the ability to evaluate expressions.</p> <ul style="list-style-type: none"> Use order of operations Use exponents Use ratios and proportions Use square roots <p>Understands and demonstrates different strategies in solving word problems.</p> <ul style="list-style-type: none"> Work backwards Identify patterns Represents problem graphically or with models Work a simpler problem Being able to translate from English phrases and sentence to algebraic expressions and equations 	<p>Uses simple counting techniques for determining probabilities</p>	<p>Demonstrates the ability to compute distances on a number line and the coordinate plane.</p>	<p>Understand and find slope.</p> <ul style="list-style-type: none"> Graphing method Algebraic method <p>Evaluate and simplify expressions</p> <p>Solve equations and inequalities.</p> <ul style="list-style-type: none"> Linear equation and inequality <p>Demonstrate the ability to graph linear equations and inequalities.</p> <ul style="list-style-type: none"> Slope-intercept form Table of values <p>Demonstrates the ability to write linear equations.</p> <ul style="list-style-type: none"> Write the equation given the graph of a line 	<p>Understands coordinate geometry</p> <ul style="list-style-type: none"> Slope Pythagorean theorem
<p style="text-align: center;">G E O M E T R Y</p>	<p>Demonstrates the ability to apply the Pythagorean theorem to calculate lengths in right triangles and other figures.</p>		<p>Demonstrate the ability to measure and/or estimate using appropriate units of length, weight, mass, and capacity.</p> <ul style="list-style-type: none"> Area Perimeter Volume <p>Determines lengths, midpoints, and areas of figures in the coordinate plane.</p> <ul style="list-style-type: none"> Midpoint formula Distance formula <p>Finds measures of central angles and the degree measure of arcs in a circle.</p>	<p>Understand and find slope.</p> <ul style="list-style-type: none"> Determine slope of a line and lines parallel and perpendicular to it 	<p>Understands the properties of parallel and perpendicular lines.</p> <ul style="list-style-type: none"> Angle relationships Slope relationships <p>Understands and applies the Pythagorean Theorem.</p> <p>Understands coordinate geometry.</p> <ul style="list-style-type: none"> Midpoint formula Distance formula <p>Understand and apply properties of geometric figures.</p> <ul style="list-style-type: none"> Congruence Similarity Symmetry <p>Demonstrates the ability to apply geometric transformations to simple geometric figures.</p> <ul style="list-style-type: none"> Reflection Translation Rotation Glide Reflection

A L G E B R A 2	<p>Understands and demonstrates different strategies in solving word problems.</p> <ul style="list-style-type: none"> • Work backwards • Identify patterns • Represent problem graphically or with models • Being able to translate from English phrases and sentences to algebraic expressions and equations <p>Understand and apply the properties of exponents, radicals, and imaginary numbers</p>	<p>Understand simple probabilities and use them to make predictions</p>	<p>Demonstrate the ability to solve simple problems involving rates and derived measurements for such attributes as velocity and density.</p>	<p>Demonstrates the ability to simplify polynomials.</p> <ul style="list-style-type: none"> • Combining like terms • Rules of exponents <p>Solve equations and inequalities</p> <ul style="list-style-type: none"> • Linear equations and inequalities • Quadratic equations <p>Demonstrates the ability to graph linear equations and inequalities, and quadratic equations.</p> <ul style="list-style-type: none"> • Slope-intercept form • Table of values • Vertex form 	<p>Understands coordinate geometry</p> <ul style="list-style-type: none"> • Distance formula • Midpoint formula
M A T H 4	<p>Performs operations with complex numbers.</p> <p>Understands the sum, difference, product, and quotient and composite of two given functions.</p>	<p>Understands and applies concepts of data analysis and distributions.</p> <p>Demonstrate the basic properties of elementary probability and statistics.</p> <p>Calculate measures of spread and center for data sets.</p>		<p>Identify the variables, domain, and range of functions.</p> <p>Identify properties of trigonometric functions</p> <p>Solves equations and inequalities.</p> <ul style="list-style-type: none"> • Linear equations/inequalities • Quadratic equations • Factoring • Quadratic formula • Completing the square 	<p>Identifies basic properties of trig functions.</p> <p>Uses trig to find sides or angles in triangles.</p> <ul style="list-style-type: none"> • Right triangles trigonometry • Law of sines • Law of cosines
C O N S U M E R M A T H	<p>Demonstrates the computational fluency with whole numbers, decimals, integers, rational numbers, and fractions.</p> <ul style="list-style-type: none"> • Compute pay • Compute taxes • Compute unit price/determine the better buy • Write a check • Compute value of a car • Balance a checkbook • Complete a deposit or withdrawal slip 			<p>Demonstrates the ability to use formulas as applied to every day world concepts</p> <ul style="list-style-type: none"> • use tax tables to find federal withholdings • simple interest • monthly payments on loans • total purchase price • finance charge for loan • costs of owning home • properly fill out a 1040 EZ form • costs of renting home 	

