

<b>Curriculum Heading</b>	<b>Curriculum Statement</b>	<b>Aligned State Standard</b>	<b>Teacher Resources</b>	<b>Performance Indicator</b>
Number Sense	Students will acquire knowledge about scientific notation.	6.A.3	Holt Textbook	Students will recognize the conversion procedure to and from scientific notation as well as multiplying and dividing numbers in this format.
Number Sense	Students will acquire knowledge about factors and prime numbers.	6.B.3b	Holt Textbook	Students will be able to describe prime numbers and determine all the factors of a number.
Number Sense	Students will acquire knowledge about the greatest common factor.	6.B.3b	Holt Textbook	Students will determine the greatest common factor of a given set of numbers.
Number Sense	Students will acquire knowledge about factoring algebraic expressions.	6.B.3b	Holt Textbook	Students will solve algebraic expressions through factoring.
Number Sense	Students will acquire knowledge about the least common multiple.	6.B.3b	Holt Textbook	Students will determine the least common multiple given two numbers.
Number Sense	Explain how math is used in many careers.	6.B.4; 6.D.4	Holt Textbook	Students will complete problems that involve topics directly associated with real life scenarios.
Number Sense and Estimation & Measurement	Students will explore problems that involve personal finance, wages, banking, and credit.	6.B.4; 6.D.4; 7.A.3a	Holt Textbook	Students will complete problems that involve topics directly associated with real life scenarios.
Number Sense and Estimation & Measurement	Students will explore problems that involve home improvement.	6.B.4; 6.D.4; 7.A.3a	Holt Textbook	Students will complete problems that involve topics directly associated with real life scenarios.
Number Sense and Estimation & Measurement	Students will explore problems that involve measurement.	6.B.4; 6.D.4; 7.A.3a	Holt Textbook	Students will complete problems that involve topics directly associated with real life scenarios.
Number Sense and Estimation & Measurement	Students will explore problems that involve taxes.	6.B.4; 6.D.4; 7.A.3a	Holt Textbook	Students will complete problems that involve topics directly associated with real life scenarios.

Number Sense and Estimation & Measurement	Students will explore problems that involve business situations.	6.B.4; 6.D.4; 7.A.3a	Holt Textbook	Students will complete problems that involve topics directly associated with real life scenarios.
Number Sense and Estimation & Measurement	Students will explore problems that involve budgets.	6.B.4; 6.D.4; 7.A.3a	Holt Textbook	Students will complete problems that involve topics directly associated with real life scenarios.
Number Sense and Estimation & Measurement	Students will explore problems that involve purchasing transportation.	6.B.4; 6.D.4; 7.A.3a	Holt Textbook	Students will complete problems that involve topics directly associated with real life scenarios.
Number Sense and Estimation & Measurement	Students will explore problems that involve financing.	6.B.4; 6.D.4; 7.A.3a	Holt Textbook	Students will complete problems that involve topics directly associated with real life scenarios.
Number Sense	Students will learn how to use logical reasoning, as well as estimations and mental computations, to determine the validity of a solution.	6.C.3b	Holt Textbook	Students will be able to explain how to work their way through various problems using reason, logic, and mental computations.
Number Sense	Students will explore problems that involve the using of ratios and proportions.	6.D.4	Holt Textbook	Students will be able to describe the relationship between ratios and proportions.
Number Sense	Students will explore problems that involve the using of percents.	6.D.4	Holt Textbook	Students will recognize the method for conversion from one unit of measure to another.
Number Sense	Students will understand the link between fractions to decimals to percents.	6.D.4; 6.A.3	Holt Textbook	Students will recognize the method for conversion from one unit of measure to another.
Estimation & Measurement	Students will understand the link between inches to feet to yards to miles.	7.A.4a	Holt Textbook	Students will recognize the method for conversion from one unit of measure to another.
Estimation & Measurement	Students will be introduced to the conversions of the metric system.	7.A.4a	Holt Textbook	Students will recognize the method for conversion from one unit of measure to another.
Estimation & Measurement	Students will understand the link between seconds to minutes to hours.	7.A.4a	Holt Textbook	Students will recognize the method for conversion from one unit of measure to another.
Estimation & Measurement	Students will understand the link between Fahrenheit to Celsius.	7.A.4a	Holt Textbook	Students will recognize the method for conversion from one unit of measure to another.

Estimation & Measurement	Students will comprehend formulas.	7.A.4b	Holt Textbook	Students will identify different mathematical formulas.
Estimation & Measurement	Students will explore the area and circumference equations of a circle.	7.A.4b	Holt Textbook	Students will complete problems that involve area and circumference of a circle.
Estimation & Measurement	Students will be introduced to the methodology for solving for the volume equation of rectangular solids.	7.A.4b	Holt Textbook	Students will find the volume of a rectangular solid by applying the correct formula.
Estimation & Measurement	Students will be introduced to the methodology for solving for the surface area of rectangular solids.	7.A.4b	Holt Textbook	Students will find the surface area of rectangular solids by applying the correct formula.
Estimation & Measurement	Students will be introduced to the methodology for solving for the volume of cylinders.	7.A.4b	Holt Textbook	Students will find the volume of cylinders by applying the correct formula.
Estimation & Measurement	Students will explore the equation for solving for the volume of cones.	7.A.4b	Holt Textbook	Students will find the volume of a cone by applying the correct formula.
Estimation & Measurement	Students will study relationships to solve problems (twice as many, half as much).	7.B.4	Holt Textbook	Students will explain relationships within verbal equations.
Algebra & Analytical Methods	Students will learn how to solve linear equations.	8.A.3b; 8.D.3b	Holt Textbook	Students will determine the solution to a linear equation through algebraic manipulation.
Algebra & Analytical Methods	Students will understand how to find the slope of a line given two points.	8.A.3b; 8.D.3b	Holt Textbook	Students will determine the slope of a line.
Algebra & Analytical Methods	Students will understand how to find the midpoint of a line segment.	8.A.3b; 8.D.3b	Holt Textbook	Students will determine the midpoint of a line segment.
Number Sense and Algebra & Analytical Methods	Students will understand the link between whole numbers to fractions.	8.A.4a; 6.A.3	Holt Textbook	Students will describe the relationships of various types of numbers.
Number Sense and Algebra & Analytical Methods	Students will understand the link between improper fractions to mixed numbers.	8.A.4a; 6.A.3	Holt Textbook	Students will describe the relationships of various types of numbers.
Algebra & Analytical Methods	Students will acquire knowledge of how a graph, table, equation, or rule is used to predict an outcome.	8.B.3	Holt Textbook	Students will predict outcomes/relationships based upon data and trends from tables and graphs.
Algebra & Analytical Methods	Students will acquire knowledge about properties of number systems to facilitate mental computations.	8.B.4a	Holt Textbook	Students will describe various techniques to facilitate mental math.

Algebra & Analytical Methods	Students will comprehend graphs, charts, and tables to predict and explain various relationships.	8.B.4a	Holt Textbook	Students will predict outcomes/relationships based upon data and trends from tables and graphs.
Algebra & Analytical Methods	Students will comprehend the representation and analyzation of relationships using tables, graphs, and equations.	8.B.4a	Holt Textbook	Students will describe how tables and graphs relate to equations.
Algebra & Analytical Methods	Students will learn how to make a table or graph from real world data.	8.B.4a	Holt Textbook	Students will complete tables or graphs of real world data.
Algebra & Analytical Methods	Students will study the performing of basic operations on polynomials.	8.B.5	Holt Textbook	Students will justify the performing of the order of operations.
Algebra & Analytical Methods	Students will be introduced to how graphs of linear equations have applications to real life scenarios.	8.C.3	Holt Textbook	Students will complete real life problems by using linear equations.
Algebra & Analytical Methods	Students will understand real world phenomena when given graphic form.	8.C.4a	Holt Textbook	Students will describe how tables and graphs relate to real life scenarios.
Algebra & Analytical Methods	Students will explore how the change in one variable affects the value of the other variable in a functional relationship.	8.C.4a	Holt Textbook	Students will explain the relationship between dependent and independent variables.
Algebra & Analytical Methods	Students will learn how to solve equations and inequalities.	8.D.3a; 8.D.4	Holt Textbook	Students will complete equations and inequalities using algebra techniques.
Algebra & Analytical Methods	Students will acquire knowledge about problem solving while using equations.	8.D.3a; 8.D.4	Holt Textbook	Students will solve equations with multiple variables.
Algebra & Analytical Methods	Students will explore the coordinate plane.	8.D.3b	Holt Textbook	Students will recognize all pertinent characteristics of the coordinate plane.
Algebra & Analytical Methods	Students will comprehend how to graph a linear equation on a coordinate plane.	8.D.3b	Holt Textbook	Students will graph linear equations on a plane.
Algebra & Analytical Methods	Students will explore parallel and perpendicular lines.	8.D.3b	Holt Textbook	Students will recognize the relationship between parallel and perpendicular lines.
Algebra & Analytical Methods	Students will be introduced to generalization in aiding the solving methods of particular problems.	8.D.4	Holt Textbook	Students will justify the concept of generalization in certain mathematical procedures.
Algebra & Analytical Methods	Students will explore the evaluation process of algebraic expressions.	8.D.4	Holt Textbook	Students will describe the process of solving for algebraic expressions.

Algebra & Analytical Methods	Students will understand how to write equations and inequalities.	8.D.4	Holt Textbook	Students will describe the process of translating graphs to equations and inequalities.
Algebra & Analytical Methods	Students will explore problems that involve the using of mathematical formulas.	8.D.4; 8.B.4a	Holt Textbook	Students will use mathematical formulas to solve various problems.
Algebra & Analytical Methods	Students will be introduced to the graphing of equations and inequalities.	8.DB.4a; 8.B.3	Holt Textbook	Students will graph linear equations and inequalities on a plane.
Geometry	Students will comprehend the concepts of congruence, similarity and symmetry.	9.A.3c	Holt Textbook	Students will explain the concepts of congruence, similarity, and symmetry.
Geometry	Students will be introduced to the equations of perimeter and area of certain polygons.	9.B.3	Holt Textbook	Students will determine the area and perimeter of polygons.
Geometry	Students will acquire knowledge about the properties of triangles.	9.B.3; 9.B.4	Holt Textbook	Students will identify polygons and solve for pieces of polygons using their properties.
Geometry	Students will acquire knowledge about the properties of quadrilaterals.	9.B.3; 9.B.4	Holt Textbook	Students will identify polygons and solve for pieces of polygons using their properties.
Geometry	Students will acquire knowledge about the properties of pentagons.	9.B.3; 9.B.4	Holt Textbook	Students will identify polygons and solve for pieces of polygons using their properties.
Geometry	Students will acquire knowledge about the properties of hexagons.	9.B.3; 9.B.4	Holt Textbook	Students will identify polygons and solve for pieces of polygons using their properties.
Geometry	Students will acquire knowledge about the properties of octagons.	9.B.3; 9.B.4	Holt Textbook	Students will identify polygons and solve for pieces of polygons using their properties.
Geometry	Students will explore the relationships such as the Pythagorean theorem to problem solving situations.	9.D.3; 9.D.4	Holt Textbook	Students will complete problems through use of the Pythagorean theorem.
Geometry	Students will be introduced to using geometry in problem solving.	9.D.3; 9.D.4	Holt Textbook	Students will identify and apply geometrical concepts within algebra based material.
Geometry	Students will understand how to find the sine, cosine, and tangent of an angle.	9.D.4	Holt Textbook	Students will use rudimentary trigonometry to solve for parts of a right triangle.

Geometry	Students will use the sine, cosine, and tangent ratios to find certain sides of triangles.	9.D.4	Holt Textbook	Students will use rudimentary trigonometry to solve for parts of a right triangle.
Geometry	Students will learn how to apply a trig table to solve problems.	9.D.4	Holt Textbook	Students will use rudimentary trigonometry to solve for parts of a right triangle.
Geometry	Students will learn how to use the sine, cosine, and tangent ratios to find certain angles of a triangle.	9.D.4	Holt Textbook	Students will use rudimentary trigonometry to solve for parts of a right triangle.
Data Analysis & Probability	Students will comprehend how to read and understand circle graphs, pictographs, bar graphs, and line graphs.	10.A.3a; 10.A.4c	Holt Textbook	Students will use graphs, tables, charts, and diagrams to interpret data and solve problems.
Data Analysis & Probability	Students will understand and calculate the mean, median, and mode.	10.A.3b	Holt Textbook	Students will determine central measures of tendency.
Data Analysis & Probability	Students will explore scatter plots and histograms and their everyday applications.	10.A.4a	Holt Textbook	Students will use graphs, tables, charts, and diagrams to interpret data and solve problems.
Data Analysis & Probability and Algebra & Analytical Methods	Students will explore problems that involve the drawing and reading of diagrams.	10.A.4a,b,c; 8.B.4a	Holt Textbook	Students will use graphs, tables, charts, and diagrams to interpret data and solve problems.
Data Analysis & Probability and Algebra & Analytical Methods	Students will explore problems that involve the making and reading of tables.	10.A.4a,b,c; 8.B.4a	Holt Textbook	Students will use graphs, tables, charts, and diagrams to interpret data and solve problems.
Data Analysis & Probability and Algebra & Analytical Methods	Students will explore problems that involve the making and reading of charts.	10.A.4a,b,c; 8.B.4a	Holt Textbook	Students will use graphs, tables, charts, and diagrams to interpret data and solve problems.
Data Analysis & Probability and Algebra & Analytical Methods	Students will explore problems that involve the making and reading of graphs.	10.A.4a,b,c; 8.B.4a	Holt Textbook	Students will use graphs, tables, charts, and diagrams to interpret data and solve problems.
Data Analysis & Probability and Algebra & Analytical Methods	Students will explore problems that involve the making and reading of maps.	10.A.4a,b,c; 8.B.4a	Holt Textbook	Students will use graphs, tables, charts, and diagrams to interpret data and solve problems.

Data Analysis & Probability and Algebra & Analytical Methods	Students will explore problems that involve the making and reading of pictographs.	10.A.4a,b,c; 8.B.4a	Holt Textbook	Students will use graphs, tables, charts, and diagrams to interpret data and solve problems.
Data Analysis & Probability	Students will learn about inductive reasoning to make generalizations from an observed pattern.	10.A.4c	Holt Textbook	Students will determine the pattern of events or a series of numbers.
Data Analysis & Probability	Students will acquire knowledge as to how to use statistical data to make decisions.	10.A.4c	Holt Textbook	Students will locate, chart, and interpret meaningful data.
Algebra	Students will explore problems that involve the identifying and collecting of relevant data.	10.B.4;8.B.4a	Holt Textbook	Students will locate, chart, and interpret meaningful data.
Data Analysis & Probability	Students will be introduced to the fundamental counting principle and tree diagrams as they apply to sample space.	10.C.3a	Holt Textbook	Students will use the laws of probability to solve statistical based problems.
Data Analysis & Probability	Students will understand how to use graphs to solve problems.	10.C.4a	Holt Textbook	Students will use graphs, tables, charts, and diagrams to interpret data and solve problems.
Data Analysis & Probability	Students will learn how to determine the probability of something happening from various activities.	10.C.4a	Holt Textbook	Students will use the laws of probability to solve statistical based problems.
Data Analysis & Probability	Students will comprehend that all probability is from 0 to 1.	10.C.4a; 10.C.3a	Holt Textbook	Students will use the laws of probability to solve statistical based problems.
Data Analysis & Probability	Students will understand the concept of odds.	10.C.4a; 10.C.3a	Holt Textbook	Students will use the laws of probability to solve statistical based problems.
Data Analysis & Probability	Students will learn how to find the odds that an event will or will not occur.	10.C.4a; 10.C.3a	Holt Textbook	Students will use the laws of probability to solve statistical based problems.
Data Analysis & Probability	Students will comprehend how sample populations and random samples are used.	10.C.4b	Holt Textbook	Students will use the laws of probability to solve statistical based problems.
Data Analysis & Probability	Students will understand the relationship of probability to the real world.	10.C.4b	Holt Textbook	Students will use the laws of probability to solve statistical based problems.
Data Analysis & Probability	Students will use a variety of simulations to relate probability, fractions, and percents.	10.C.4b	Holt Textbook	Students will use the laws of probability to solve statistical based problems.

Data Analysis & Probability	Students will interpret real world probabilities and odds.	10.C.4b; 10.C.3b	Holt Textbook	Students will use the laws of probability to solve statistical based problems.
Data Analysis & Probability	Students will understand the difference between independent and dependent events.	10.C.5a	Holt Textbook	Students will use the laws of probability to solve statistical based problems.



<b>Curriculum Heading</b>	<b>Curriculum Statement</b>	<b>Aligned State Standard</b>	<b>Teacher Resources</b>	<b>Performance Indicator</b>
Algebra & Analytical Methods	Students will understand how to represent patterns and how to use them in predicting future events.	8.B.3	Holt Textbook	Students will predict future events analyzing the pattern observed in given data.
Algebra & Analytical Methods	Students will understand how to simplify algebraic expressions using order of operation.	8.D.4	Holt Textbook	Students will use order of operations in simplifying algebraic expressions.
Algebra & Analytical Methods	Students will acquire knowledge of stem and leaf plots, line plots, tables, and circle graphs to represent algebraic data.	8.B.4a	Holt Textbook	Students will represents data using a stem and leaf plot, a line plot, a table, or a circle graph.
Algebra & Analytical Methods	Students will understand how to use tables, graphs, charts etc. to make prediction about future outcomes or relationships.	8.B.3	Holt Textbook	Students will predict outcomes/relationships based on tables and graphs.
Number Sense	Students will understand algebraic properties including equality, identity, distributive, commutative, and associative properties.	6.A.4	Holt Textbook	Students will identify the algebraic properties used in solving an algebraic problem.
Algebra & Analytical Methods	Students will acquire knowledge of sets of numbers including real, rational, irrational, integers, whole, and natural.	6.B.3c	Holt Textbook	Students will identify the numbers belonging to a given set of numbers and determine which set contains a specific number.
Algebra & Analytical Methods	Students will learn to solve equations and inequalities	8.A.3b;8.D.3a	Holt Textbook	Students will use algebraic techniques to solve equations and inequalities.
Algebra & Analytical Methods	Students will understand how to solve for angles of a triangle using equation solving techniques.	8.D.3A	Holt Textbook	Students will determine the missing angle of a triangle using information about angles in a triangle.

Algebra & Analytical Methods	Students will explore problems that involve the use of mathematical formulas.	8.D.4;8.B.4a	Holt Textbook	Students will solve problems using mathematical formulas.
Number Sense	Students will explore problems involving the use of ratios and proportions.	6.D.4	Holt Textbook	Students will solve problems using their knowledge of ratios and proportions.
Estimation & Measurement	Students will comprehend how to make indirect measurements using ratios and proportions.	7.A.4a	Holt Textbook	Students will determine an indirect measurement using proportions (i.e. find the height of a tree)
Geometry	Students will acquire knowledge of the concepts of congruency and similarity.	9A.3c	Holt Textbook	Students will identify similar and congruent figures. They will solve for missing corresponding sides.
Geometry	Students will be introduced to right triangle trigonometry including sine, cosine, and tangent functions.	9.D.4	Holt Textbook	Students will determine the sine, cosine, tangent of a given angle.
Geometry	Students will understand how to use trigonometry to find missing sides and angles of a given triangle.	9.D.4	Holt Textbook	Students will determine the missing side or angle for a given triangle.
Geometry	Students will learn how to apply trigonometry to solve real world problems.	9.D.4	Holt Textbook	Students will determine unknown distances in real world problems using their knowledge of trigonometry.
Number Sense	Students will understand the concept of percents, percent increases, and percent decreases.	6.D.4	Holt Textbook	Students will solve problems involving percents.
Data Analysis & Probability	Students will comprehend the difference between probability and odds.	10.C.4a	Holt Textbook	Students will find the probability and the odds of an event happening.
Algebra & Analytical Methods	Students will acquire knowledge of direct variation and indirect variation between two quantities.	8.B.3	Holt Textbook	Students will find the value of a variable using their knowledge of direct or indirect variation.

Algebra & Analytical Methods	Students will explore how the change in one variable affects the value of the other variable in a functional relationship.	8.C.4a	Holt Textbook	Students will explain the relationship between dependent and independent variables.
Algebra & Analytical Methods	Students will understand the difference between a relation and a function.	8.C.4a	Holt Textbook	Students will recognize whether a relation is a function.
Algebra & Analytical Methods	Students will acquire knowledge of the coordinate plane.	8.D.3b	Holt Textbook	Students will recognize the axis, quadrants, origin and other important parts of the coordinate plane.
Algebra & Analytical Methods	Students will acquire knowledge of graphing relations and functions on the coordinate plane.	8.C.4a	Holt Textbook	Students will graph linear functions and relations on the coordinate plane
Algebra & Analytical Methods	Students will understand the process of writing equations to represent given patterns of data.	8.C.3	Holt Textbook	Students will determine the equation which correctly represents the relationship of given data.
Algebra & Analytical Methods	Students will understand the concept of slope and how to find the slope of a given line.	8.A.3b;8.D.3b	Holt Textbook	Students will use the slope formula to find the slope of a given line.
Algebra & Analytical Methods	Students will comprehend how to write the equation of a line.	8.D.4	Holt Textbook	Students will write the equation of a given line in one of three forms.
Algebra & Analytical Methods	Students will understand standard form, slope- intercept form, and point-slope form of a line.	8.D.4	Holt Textbook	Students will rewrite the equation of a given line in slope-intercept, point-slope, or standard form.
Algebra & Analytical Methods	Students will acquire knowledge of graphing a line from any of the three forms.	8.D.3b	Holt Textbook	Students will graph a line from slope-intercept form, point-slope form, or standard form.
Algebra & Analytical Methods	Students will acquire knowledge of parallel and perpendicular lines	8.D.3b	Holt Textbook	Students will recognize parallel and perpendicular lines.

Algebra & Analytical Methods	Students will understand the relationship between the equations of two lines that are parallel or perpendicular.	8.D.3b	Holt Textbook	Students will write the equation of a line parallel to or perpendicular to a given line
Algebra & Analytical Methods	Students will comprehend the midpoint of a segment.	8.A.3b;8.D.3b	Holt Textbook	Students will use the midpoint formula to find the midpoint of a given segment.
Algebra & Analytical Methods	Students will comprehend the procedure followed in solving linear inequalities graphically.	8.D.4	Holt Textbook	Students will solve linear inequalities graphically.
Algebra & Analytical Methods	Students will understand compound inequalities involving the conjunctions "and" and "or"	8.D.4	Holt Textbook	Students will solve compound inequalities graphically on a number line and in the coordinate plane.
Algebra & Analytical Methods	Students will acquire knowledge of absolute value equations and inequalities and understand how to use these to describe relationships.	8.B.b	Holt Textbook	Students will represent relationships using absolute value equations and solve absolute value equations or inequalities.
Algebra & Analytical Methods	Students will explore graphing absolute value equations or inequalities on a number line.	8.D.4	Holt Textbook	Students will graph absolute value inequalities and equations on a number line.
Algebra & Analytical Methods	Students will explore graphing linear inequalities.	8.B.4a;8.B.3	Holt Textbook	Students will graph linear inequalities on a coordinate plane.
Algebra & Analytical Methods	Students will learn how to translate words into algebraic expressions.	8.D.4	Holt Textbook	Students will translate words into algebraic expressions in order to write and solve equations.
Number Sense	Students will understand the relationship between scientific notation and standard notation.	6.A.3	Holt Textbook	Students will convert a number from scientific notation to standard notation and from standard notation to scientific notation.
Algebra & Analytical Methods	Students will understand how to perform mathematical operations on polynomials.	8.B.5	Holt Textbook	Students will add, subtract, multiply, and divide polynomials.

Algebra & Analytical Methods	Students will acquire knowledge of polynomials including monomials, binomials, and trinomials.	8.B.5	Holt Textbook	Students will identify polynomials and identify related concepts including degree, type, descending or ascending order.
Number Sense	Students will learn the concept of greatest common factor as it relates to polynomials.	6.B.3b	Holt Textbook	Students will recognize and factor the gcd of a polynomial.
Number Sense	Students will comprehend factoring trinomials.	6.B.3b	Holt Textbook	Students will use the guess and check method as well as several other methods to factor trinomials.
Algebra & Analytical Methods	Students will learn about quadratic functions.	8.C.4a	Holt Textbook	Students will identify quadratic functions.
Algebra & Analytical Methods	Students will understand how to graph quadratic functions by finding ordered pairs and patterning	8.C.4a	Holt Textbook	Students will graph quadratic equations using ordered pairs and also using the pattern for quadratic functions.
Algebra & Analytical Methods	Students will explore how to solve quadratic equations by factoring, graphing, and the quadratic formula.	8.C.4a	Holt Textbook	Students will solve quadratic equations using their knowledge of factoring, graphing, and the quadratic formula.
Geometry	Students will acquire knowledge of the Pythagorean theorem and understand its usefulness in solving right triangles.	9.D.4:9.D.3	Holt Textbook	Students will find the missing side of a right triangle using the Pythagorean theorem and use this information in solving a problem.
Estimation & Measurement	Students will acquire knowledge of the distance between two points in the coordinate plane.	7.A.4b	Holt Textbook	Students will determine the distance between two points.
Number Sense	Students will be introduced to rules for simplifying radical expressions.	6.A.4	Holt Textbook	Students will determine the simplified value of a radical expression.

Number Sense	Students will understand how to use basic mathematical operations on radical expressions.	6.A.4	Holt Textbook	Students will find the sum, difference, product, and quotient of radical expressions.
Algebra & Analytical Methods	Students will explore solving and graphing radical equations.	8.B.4a	Holt Textbook	Students will graph and solve radical equations using mathematical properties.
Number Sense	Students will understand how to estimate the solution to a problem and comprehend the value of this tool in problem solving.	6.C.5b	Holt Textbook	Students will demonstrate the ability to estimate the solution to a problem without solving the problem.
Number Sense	Students will acquire knowledge of mathematical properties including the associative, commutative, distributive, and identities.	6.A.4	Holt Textbook	Students will identify and apply the associative, commutative, distributive properties within algebraic expressions.

<b>Curriculum Heading</b>	<b>Aligned State Standard</b>	<b>State Standard</b>	<b>Teacher Resources</b>	<b>Performance Indicator</b>
Algebra	Students will learn the relationship of variables to algebra.	6.B.4	Glencoe Text	Students will recognize, write, and evaluate variable expressions.
Algebra	Students will learn about exponents and powers.	6.A.4	Glencoe Text	Students will evaluate algebraic expressions containing exponents and powers.
Algebra	Students will understand the order of operations.	6.A.4	Glencoe Text	Students will evaluate algebraic expressions using the order of operations.
Algebra	Students will learn about equations and inequalities.	8.B.4a	Glencoe Text	Students will solve equations and inequalities using mental math.
Algebra	Students will learn how to use a plan to solve problems.	7.A.4b	Glencoe Text	Students will develop a problem solving plan and use it to solve real-life problems.
Algebra	Students will learn how to use tables and graphs to organize data.	10.A.4a	Glencoe Text	Students will organize data representing real-life situations into tables or graphs.
Algebra	Students will understand functions.	8.B.4a	Glencoe Text	Students will construct input and output tables for functions.
Algebra	Students will learn how to add and subtract real numbers.	7.A.4b	Glencoe Text	Students will evaluate addition and subtraction expressions.
Algebra	Students will learn how to add and subtract matrices.	8.C.4b	Glencoe Text	Students will add and subtract two matrices.
Algebra	Students will learn how to multiply and divide real numbers.	6.A.4	Glencoe Text	Students will use the multiplication and division rules for real numbers to simplify algebraic expressions.
Algebra	Students will learn the relationship between odds and probability.	10.C.4a	Glencoe Text	Students will find the odds and probability of given events.

Algebra	Students will solve equations using addition and subtraction.	6.B.4	Glencoe Text	Students will solve equations using the addition and subtraction properties for solving equations.
Algebra	Students will solve equations using multiplication and division.	6.B.4	Glencoe Text	Students will use the multiplication and division properties to solve algebraic equations.
Algebra	Students will solve multi-step equations.	6.A.4	Glencoe Text	Students will solve algebraic multi-step equations.
Algebra	Students will solve equations with variables on both sides of the equation	6.A.4	Glencoe Text	Students will evaluate algebraic equations with variables on both sides of the equation.
Algebra	Students will learn to use linear equations to solve word problems.	7.A.4b	Glencoe Text	Students will write and solve real-life word problems using linear equations.
Algebra	Students will learn how to solve equations containing decimals.	6.A.4	Glencoe Text	Students will solve algebraic equations containing decimals.
Algebra	Students will learn how to solve a formula for an indicated letter.	6.B.4	Glencoe Text	Students will solve a formula for an indicated letter.
Algebra	Students will understand rates, ratios, and proportions.	6.C4	Glencoe Text	Students will solve real-life problems involving rates, ratios, and proportions.
Algebra	Students will understand coordinates and scatter plots.	10.A.4a	Glencoe Text	Students will plot scatter plots on the coordinate plane.
Algebra	Students will graph linear equations using a table.	8.B.4a	Glencoe Text	Students will graph linear equations by plotting points on the coordinate plane.
Algebra	Students will understand the slope of a line.	7.B.4a	Glencoe Text	Students will use x and y intercepts to graph linear equations.
Algebra	Students will understand direct variation.	8.B.4a	Glencoe Text	Students will find and use the direct variation equations to find solutions to real-life problems.
Algebra	Students will graph linear equations using the slope and intercept.	8.B.4a	Glencoe Text	Students will use the slope and y intercept to graph linear equations.



Algebra	Students will learn to solve linear equations graphically.	8.B.4a	Glencoe Text	Students will solve linear equations graphically using the coordinate plane.
Algebra	Students will understand the difference between functions and relations.	7.A.4b	Glencoe Text	Students will state whether a relation is a function or not.
Algebra	Students will learn to write equations in slope-intercept form.	8.B.4a	Glencoe Text	Students will write linear equations in slope-intercept form.
Algebra	Students will learn how to write linear equations given the slope and a point.	8.B.4a	Glencoe Text	Students will write linear equations given the slope and a point.
Algebra	Students will learn how to write linear equations given two points.	8.B.4a	Glencoe Text	Students will write linear equations given two points on a line.
Algebra	Students will learn how to fit a line to graphed data	8.B.4a	Glencoe Text	Students will write the equation for the best fit line from a set of data graphed on the coordinate plane.
Algebra	Students will learn how to write the point-slope form of a linear equation.	8.B.4a	Glencoe Text	Students will write the point-slope form of linear equations.
Algebra	Students will learn how to write the standard form of a linear equation.	8.B.4a	Glencoe Text	Students will write the standard form of linear equations.
Algebra	Students will learn how to multiply and divide real numbers.	6.A.4	Glencoe Text	Students will use the multiplication and division rules for real numbers to simplify algebraic expressions.
Algebra	Students will learn how to use a linear model to make real-life predictions.	8.B.4a	Glencoe Text	Students will make predictions about real-life situations from linear equations.
Algebra	Students will learn how to solve one-step linear inequalities.	8.B.4a	Glencoe Text	Students will solve one-step and multi-step linear inequalities.
Algebra	Students will learn how to solve compound inequalities.	8.B.4a	Glencoe Text	Students will solve compound inequalities.

Algebra	Students will learn to solve absolute-value equations and inequalities.	8.B.4a	Glencoe Text	Students will solve absolute-value equations and inequalities.
Algebra	Students will learn to graph linear inequalities in two variables.	8.B.4a	Glencoe Text	Students will graph linear inequalities in two variables.
Algebra	Students will learn how to find the mean, median and mode of a stem-and-leaf plot.	10.A.4a	Glencoe Text	Students will find the mean, median and mode of a stem and leaf plot.
Algebra	Students will learn how to construct box-and-whisker plots.	10.A.4a	Glencoe Text	Students will construct box-and whisker plots.
Algebra	Students will learn to solve a linear system of equations by graphing.	8.B.4a	Glencoe Text	Students will solve linear systems of equations by graphing.
Algebra	Students will learn to solve a linear system of equations by using the substitution and elimination methods.	8.B.4b	Glencoe Text	Students will solve systems of linear equations using the substitution and elimination methods.
Algebra	Students will learn how to use a system of linear equations to model real-life situations.	6.D.4	Glencoe Text	Students will solve real life problems using a system of linear equations.
Algebra	Students will learn how to solve special types of linear equations.	6.D.4	Glencoe Text	Students will solve special types of linear equations.
Algebra	Students will learn how to solve systems of linear inequalities.	8.B.4a	Glencoe Text	Students will solve systems of linear inequalities.
Algebra	Students will learn how to apply the multiplication properties of exponents.	6.A.4	Glencoe Text	Students will use the properties of exponents to evaluate algebraic expressions.
Algebra	Students will learn to apply the zero and negative exponent properties.	6.A.4	Glencoe Text	Students will solve algebraic expressions zero and negative exponents.

Algebra	Students will learn how to apply the division properties for exponents.	6.A.4	Glencoe Text	Students will solve algebraic expressions using the division properties for exponents.
Algebra	Students will learn how to use scientific notation to represent numbers.	7.A.4a	Glencoe Text	Students will write numbers given in standard in scientific notation and vice versa.
Algebra	Students will learn to graph and use models for exponential growth.	8.B.4a	Glencoe Text	Students will graph and evaluate models for exponential growth.
Algebra	Students will learn to graph and use models for exponential decay.	8.B. 4a	Glencoe Text	Students will graph and evaluate models for exponential decay.
Algebra	Students will learn how to solve quadratic equations by finding square roots.	6.A.4	Glencoe Text	Students will solve quadratic equations by finding square roots.
Algebra	Students will learn how to simplify square roots.	6.A.4	Glencoe Text	Students will simplify square roots.
Algebra	Students will learn how to solve quadratic equations by graphing.	6.B.4a	Glencoe Text	Students will solve quadratic equations by graphing.
Algebra	Students will learn how to solve quadratic equations by using the quadratic formula.	7.A.4b	Glencoe Text	Students will solve quadratic equations by using the quadratic formula.
Algebra	Students will learn how to use the discriminant to find the number of solutions of a quadratic equation.	7.A.4b	Glencoe Text	Students will find the discriminate of a quadratic equation and state the number and nature of the solutions.
Algebra	Students will learn how to graph quadratic inequalities.	7.A.4b	Glencoe Text	Students will graph quadratic inequalities.
Algebra	Students will learn the difference between linear, exponential, and quadratic models.	8.B.4b	Glencoe Text	Students will sketch the graphs of linear, exponential, and quadratic equations.

Algebra	Students will learn how to add and subtract polynomials.	6.A.4	Glencoe Text	Students will add and subtract polynomials.
Algebra	Students will learn to multiply special products of polynomials	6.A.4	Glencoe Text	Students will multiply special products of polynomials.
Algebra	Students will learn to solve polynomial equations in factored form.		Glencoe Text	Students will solve polynomial equations in factored form.
Algebra	Students will learn to factor polynomial equations in $x^2 + bx + c$ form.		Glencoe Text	Students will factor polynomial equations in $ax^2 + bx + c$ form.
Algebra	Students will learn how to factor special products.	8.B.4b.	Glencoe Text	Students will factor special products.
Algebra	Students will learn how to factor using the distributive property.	6.A.4	Glencoe Text	Students will factor using the distributive property.
Algebra	Students will learn how to solve proportions.	6.D.4	Glencoe Text	Students will solve proportions.
Algebra	Students will learn how to use equations to solve percent problems.	6D.4	Glencoe Text	Students will solve percent problems using equations.
Algebra	Students will learn how to use direct and inverse variation.	6.D.4	Glencoe Text	Students will solve direct and inverse variation problems.
Algebra	Students will learn how to simplify rational expressions.	7.A.4b	Glencoe Text	Students will solve rational expressions.
Algebra	Students will learn how to add, subtract, multiply and divide rational expressions.	8.C.4b	Glencoe Text	Students will add and subtract, multiply and divide rational expressions.
Algebra	Students will learn to divide polynomials.	8.B.4a	Glencoe Text	Students will divide polynomials.

Algebra	Students will learn to solve rational equations.	8.B.4a	Glencoe Text	Students will solve rational equations.
Algebra	Students will learn to evaluate and graph square root functions.	7.A.4a	Glencoe Text	Students will evaluate and graph square root functions.
Algebra	Students will learn to add, subtract, multiply, and divide radical numbers.	6.A.4	Glencoe Text	Students will add, subtract, multiply and divide radical expressions.
Algebra	Students will learn how to solve quadratic equations by completing the squares.	8.B.4a	Glencoe Text	Students will solve quadratic equations by completing the square.
Algebra	Students will learn how to use the Pythagorean Theorem and its Converse.	7.A.4b	Glencoe Text	Students will solve real life problems using the Pythagorean Theorem and it's converse.
Algebra	Students will learn how to use the distance and midpoint formulas.		Glencoe Text	Students will find the midpoint and distance given two points.
Algebra	Students will learn to solve real-life problems using the trigonometric ratios.		Glencoe Text	Students will solve real-life problems using the trigonometric ratios.
Algebra	Students will learn to prove that a statement is true using logical reasoning and proof.		Glencoe Text	Students will prove that a statement is true using logical reasoning and proof.

<b>Curriculum Heading</b>	<b>Curriculum Statement</b>	<b>Aligned State Standard</b>	<b>Teacher Resources</b>	<b>Performance Indicator</b>
Geometry	Students will understand midpoint.	9.B.4	Geometry Concepts and Applications Text	Students will locate the midpoint of a segment.
Number Sense	Students will explore the various ways to determine the distance between points.	6.A	Geometry Concepts and Applications Text	Students will determine the distance between points on both a number line and coordinate plane.
Geometry	Students will learn about various types of angles.	9.A	Geometry Concepts and Applications Text	Students will identify and classify angles.
Geometry	Students will learn different formulas for finding angle measures.	9.B.4	Geometry Concepts and Applications Text	Students will identify and find measures of adjacent, vertical, complementary, supplementary and linear pairs of angles.
Geometry	Students will learn about lines and planes	9.B.4	Geometry Concepts and Applications Text	Students will describe the relationships between two lines and between two planes.
Geometry	Students will learn the properties of parallel lines.	9.B.4	Geometry Concepts and Applications Text	Students will use the properties of parallel lines to determine angle measures.
Geometry	Students will understand the angle conditions that will produce parallel lines.	9.B.4	Geometry Concepts and Applications Text	Students will recognize angle conditions that produce parallel lines.
Geometry	Students will learn the properties of equality.	9.C.4c	Geometry Concepts and Applications Text	Students will use the properties of equality in algebraic and geometric proofs.
Geometry	Students will learn about constructions.	9.A	Geometry Concepts and Applications Text	Students will construct various geometric situations ( angles, lines, triangles) using a compass and straightedge.
Geometry	Students will use the slope to describe a line or set of lines.	9.B.4	Geometry Concepts and Applications Text	Students will be able to find the slope of a line and use the slope to identify the kind of lines.
Geometry	Students will learn the parts of a triangle.	9.C.4	Geometry Concepts and Applications Text	Students will identify the parts of a triangle.
Geometry	Students will explore the relationship between the angles of a triangle.	9.A	Geometry Concepts and Applications Text	Students will use the angle sum theorem and the exterior angle theorem to evaluate the measures of the angles of a triangle.
Geometry	Students will learn properties of special types of triangles.	9.C.4	Geometry Concepts and Applications Text	Students will use the properties of isosceles and equilateral triangles to solve various angle measures and lengths of sides.
Geometry	Students will understand the secondary parts of a triangle.	9.B.4	Geometry Concepts and Applications Text	Students will identify and verify the altitude, median, angle bisectors and perpendicular bisectors of sides in a triangle.

Geometry	Students will learn about right triangles.	9.C.4	Geometry Concepts and Applications Text	Students will recognize and use tests for congruence of right triangles.
Geometry	Students will comprehend the concept of similarity.	9.A.5	Geometry Concepts and Applications Text	Students will identify the similar parts of triangles and use the properties of similarity to set up and solve proportions.
Number Sense	Students will study quadrilaterals.	6.D.4	Geometry Concepts and Applications Text	Students will recognize and define parallelograms.
Number Sense	Students will learn about parallelograms.	6.D.4	Geometry Concepts and Applications Text	Students will recognize and apply the conditions that ensure that a quadrilateral is a parallelogram.
Geometry	Students will learn about rectangles.	9.B.4	Geometry Concepts and Applications Text	Students will justify why a parallelogram is a rectangle.
Geometry	Students will learn about squares and rhombi.	9.C.4	Geometry Concepts and Applications Text	Students will justify the existence of a square or rhombi.
Geometry	Students will learn about trapezoids.	9.D.5	Geometry Concepts and Applications Text	Students will justify the existence of trapezoids.
Geometry	Students will learn properties of quadrilaterals with respect to angle measures and diagonals.	9.D	Geometry Concepts and Applications Text	Students will use properties of specific quadrilaterals to solve angle measures and side lengths.
Geometry	Students will understand the Pythagorean Theorem.	9.D.4	Geometry Concepts and Applications Text	Students will use the Pythagorean theorem and its converse to verify existence of right triangles as well as solve sides of a right triangle.
Geometry	Students will use ratios to solve sides of special right triangles.	9.D.4	Geometry Concepts and Applications Text	Students will use special right triangles to solve measures of sides. (30-60-90, 45-45-90)
Geometry	Students will be introduced to basic triangle trigonometry.	9.D.4	Geometry Concepts and Applications Text	Students will express trigonometric ratios as fractions or decimals.
Geometry	Students will learn different ways to measure angles.	9.B	Geometry Concepts and Applications Text	Students will convert angle measures from radians to degrees and vice versa.
Algebra & Analytical Methods	Students will be introduced to basic trig graphs.	8	Geometry Concepts and Applications Text	Students will use trigonometric functions to model periodic phenomena.
Geometry	Student will learn about circle parts.	9.B.4	Geometry Concepts and Applications Text	Students will name parts of circles.

Geometry	Students will learn to calculate the measures of arcs and angles with respect to a circle.	9.B.4	Geometry Concepts and Applications Text	Students will use the relationships between arcs, chords and radii to evaluate different angle measures and segment lengths.
Geometry	Students will learn about interior and exterior lines and how they impact a circle.	9.B.4	Geometry Concepts and Applications Text	Students will use theorems involving chords, secant lines and tangent lines to solve various problems.
Geometry	Students will gain knowledge about polygons.	9.B.4	Geometry Concepts and Applications Text	Students will identify and name polygons.
Estimation & Measurement	Students will learn area formulas.	7.C	Geometry Concepts and Applications Text	Students will determine the areas of triangles, quadrilaterals, and regular polygons.
Estimation & Measurement	Students will learn formulas for a circle.	7.C	Geometry Concepts and Applications Text	Students will determine the circumference and area of circles.
Estimation & Measurement	Students will gain knowledge about the impact a change in measurement will have on other calculations.	7.C	Geometry Concepts and Applications Text	Students will demonstrate they understand the impact that change in measurement has by solving a series of area problems.
Data Analysis & Probability	Students will study volume.	9	Geometry Concepts and Applications Text	Students will determine the volume of three dimensional figures.
Algebra & Analytical Methods	Students will understand scale factors.	8.B	Geometry Concepts and Applications Text	Students will find the center and scale factor of a given dilation.
Algebra & Analytical Methods	Students will learn about rotations and translations.	8.C	Geometry Concepts and Applications Text	Students will name and draw rotations and translations of figures to match criteria.



<b>Curriculum Heading</b>	<b>Curriculum Statement</b>	<b>Aligned State Standard</b>	<b>Teacher Resources</b>	<b>Performance Indicator</b>
Geometry	Students will understand midpoint.	9.B.4	Glencoe Text	Students will locate the midpoint of a segment.
Number Sense	Students will explore the various ways to determine the distance between points.	6.A	Glencoe Text	Students will determine the distance between points on both a number line and coordinate plane.
Geometry	Students will learn about various types of angles.	9.A	Glencoe Text	Students will identify and classify angles.
Geometry	Students will learn different formulas for finding angle measures.	9.B.4	Glencoe Text	Students will identify and find measures of adjacent, vertical, complementary, supplementary and linear pairs of angles.
Geometry	Students will learn about lines and planes	9.B.4	Glencoe Text	Students will describe the relationships between two lines and between two planes.
Geometry	Students will learn the properties of parallel lines.	9.B.4	Glencoe Text	Students will use the properties of parallel lines to determine angle measures.
Geometry	Students will understand the angle conditions that will produce parallel lines.	9.B.4	Glencoe Text	Students will recognize angle conditions that produce parallel lines.
Geometry	Students will learn about the parts of a conditional statement.	9.C.4	Glencoe Text	Students will identify the hypothesis and conclusion of a conditional statement.
Geometry	Students will learn about deductive reasoning.	9.C.4c	Glencoe Text	Students will use the law of detachment and the law of syllogism in deductive reasoning.
Geometry	Students will learn the properties of equality.	9.C.4c	Glencoe Text	Students will use the properties of equality in algebraic and geometric proofs.
Geometry	Students will learn about two column and paragraph proofs.	9.C.4c	Glencoe Text	Students will complete proofs involving segment and angle theorems.
Geometry	Students will acquire knowledge necessary to write different types of proofs.	9.C.4c	Glencoe Text	Students will write both formal and informal proofs.
Geometry	Students will learn about constructions.	9.A	Glencoe Text	Students will construct various geometric situations ( angles, lines, triangles) using a compass and straightedge.

Geometry	Students will use the slope to describe a line or set of lines.	9.B.4	Glencoe Text	Students will be able to find the slope of a line and use the slope to identify the kind of lines.
Geometry	Students will learn the parts of a triangle.	9.C.4	Glencoe Text	Students will identify the parts of a triangle.
	Students will explore the relationship between the angles of a triangle.	9.A	Glencoe Text	Students will use the angle sum theorem and the exterior angle theorem to evaluate the measures of the angles of a triangle.
Geometry	Students will learn various ways to prove triangles congruent.	9.C.4	Glencoe Text	Students will prove triangles are congruent using SSS,ASA, HL, SSS, AAS theorems.
Geometry	Students will learn properties of special types of triangles.	9.C.4	Glencoe Text	Students will use the properties of isosceles and equilateral triangles to solve various angle measures and lengths of sides.
Geometry	Students will understand the secondary parts of a triangle.	9.B.4	Glencoe Text	Students will identify and verify the altitude, median, angle bisectors and perpendicular bisectors of sides in a triangle.
Geometry	Students will learn about right triangles.	9.C.4	Glencoe Text	Students will recognize and use tests for congruence of right triangles.
Geometry	Students will comprehend the concept of similarity.	9.A.5	Glencoe Text	Students will identify the similar parts of triangles and use the properties of similarity to set up and solve proportions.
Geometry	Students will be introduced to triangle proofs.	9.B.4	Glencoe Text	Students will apply the triangle equality theorems in proofs and to solve problems.
Number Sense	Students will study quadrilaterals.	6.D.4	Glencoe Text	Students will recognize and define parallelograms.
Number Sense	Students will learn about parallelograms.	6.D.4	Glencoe Text	Students will recognize and apply the conditions that ensure that a quadrilateral is a parallelogram.
Geometry	Students will learn about rectangles.	9.B.4	Glencoe Text	Students will justify why a parallelogram is a rectangle.
Geometry	Students will learn about squares and rhombi.	9.C.4	Glencoe Text	Students will justify the existence of a square or rhombi.
Geometry	Students will learn about trapezoids.	9.D.5	Glencoe Text	Students will justify the existence of trapezoids.

Geometry	Students will learn properties of quadrilaterals with respect to angle measures and diagonals.	9.D	Glencoe Text	Students will use properties of specific quadrilaterals to solve angle measures and side lengths.
Geometry	Students will understand the concept of geometric mean.	9.B.4	Glencoe Text	Students will find the geometric mean between a pair of numbers.
Geometry	Students will understand the Pythagorean Theorem.	9.D.4	Glencoe Text	Students will use the Pythagorean theorem and its converse to verify existence of right triangles as well as solve sides of a right triangle.
Geometry	Students will use ratios to solve sides of special right triangles.	9.D.4	Glencoe Text	Students will use special right triangles to solve measures of sides. (30-60-90, 45-45-90)
Geometry	Students will be introduced to basic triangle trigonometry.	9.D.4	Glencoe Text	Students will express trigonometric ratios as fractions or decimals.
Geometry	Students will learn different ways to measure angles.	9.B	Glencoe Text	Students will convert angle measures from radians to degrees and vice versa.
Geometry	Students will be introduced to circular functions.	9.B	Glencoe Text	Students will explain trigonometry as a circular function.
Geometry	Students will learn identifies.	9	Glencoe Text	Students will use trigonometric identities to transform expressions.
Algebra & Analytical Methods	Students will be introduced to basic trig graphs.	8	Glencoe Text	Students will use trigonometric functions to model periodic phenomena.
Algebra & Analytical Methods	Students will learn about vectors.	8.C.4b	Glencoe Text	Students will manipulate vectors both algebraically and geometrically.
Algebra & Analytical Methods	Students will learn about measuring resultant.	8.C.4b	Glencoe Text	Students will evaluate the amplitude and magnitude of a vector.
Geometry	Student will learn about circle parts.	9.B.4	Glencoe Text	Students will name parts of circles.
Geometry	Students will learn to calculate the measures of arcs and angles with respect to a circle.	9.B.4	Glencoe Text	Students will use the relationships between arcs, chords and radii to evaluate different angle measures and segment lengths.

Geometry	Students will learn about interior and exterior lines and how they impact a circle.	9.B.4	Glencoe Text	Students will use theorems involving chords, secant lines and tangent lines to solve various problems.
Geometry	Students will gain knowledge about polygons.	9.B.4	Glencoe Text	Students will identify and name polygons.
Estimation & Measurement	Students will learn area formulas.	7.C	Glencoe Text	Students will determine the areas of triangles, quadrilaterals, and regular polygons.
Estimation & Measurement	Students will learn formulas for a circle.	7.C	Glencoe Text	Students will determine the circumference and area of circles.
Data Analysis & Probability	Students will explore the concept of geometric probability.	10.C	Glencoe Text	Students will use area to solve problems involving geometric probability.
Estimation & Measurement	Students will gain knowledge about the impact a change in measurement will have on other calculations.	7.C	Glencoe Text	Students will demonstrate they understand the impact that change in measurement has by solving a series of area problems.
Data Analysis & Probability	Students will study volume.	9	Glencoe Text	Students will determine the volume of three dimensional figures.
Algebra & Analytical Methods	Students will understand scale factors.	8.B	Glencoe Text	Students will find the center and scale factor of a given dilation.
Algebra & Analytical Methods	Students will learn about rotations and translations.	8.C	Glencoe Text	Students will name and draw rotations and translations of figures to match criteria.
Geometry	Students will study tessellations.	9	Glencoe Text	Students will be able to successfully tessellate a geometric figure.
				Geometry Enriched and Geometry Regular will use the same book. The book is set up for 3 levels of Geometry. We will use the assignments, tests, and quizzes for the Regular kids in the level A set up in the book. For the enriched classes we will use the level C portion of the book.

<b>Curriculum Heading</b>	<b>Curriculum Statement</b>	<b>Aligned State Standard</b>	<b>Teacher Resources</b>	<b>Performance Indicator</b>
Algebra and Analytical Methods	Student will review and master solving single and multi- step equations.	8.A.3	Math Matters 3	Student demonstrates solving single and multi- step equations.
Number Sense	Students will learn about operations with polynomials.	6.B.5, 6.D.5	Math Matters 3	Students will add, subtract and multiply polynomials.
Number Sense	Students will review and master solving linear inequalities.	6.A.5	Math Matters 3	Students demonstrates solving linear inequalities using problem solving and graphing.
Algebra & Analytical Methods	Students will learn to graph and interpret linear inequalities.	8.B.5	Math Matters 3	Students will graph and interpret linear inequalities.
Number Sense	Students will learn to simplify expressions with positive and negative exponents.	6.B.5	Math Matters 3	Students will simplify expressions with positive and negative exponents.
Number Sense	Students will expand on ability to simplify radicals without a calculator.	6.B.5	Math Matters 3	Students will solve and simplify radicals without a calculator.
Algebra & Analytical Methods	Students will learn to solve radical equations.	8.D.5	Math Matters 3	Students will simplify equations with radicals.
Number Sense	Students will learn to evaluate radicals with a calculator .	6.C.5	Math Matters 3	Students will evaluate radicals using a calculator.
Algebra & Analytical Methods	Students will review factoring techniques.	8.A.5	Math Matters 3	Students demonstrate knowledge of factoring techniques.
Algebra & Analytical Methods	Students will learn to find the zeros of a function or relation.	8.A.5	Math Matters 3	Students will find the zeros of a function or relation.
Algebra & Analytical Methods	Students will be able to graph function with and without a calculator.	8.B.5, 8.D.5	Math Matters 3	Students will graph a function with and without a calculator.
Algebra & Analytical Methods	Students will be able to identify the domain and range of a given function or relation.	8.B.5, 8.D.5	Math Matters 3	Students identify the domain and range of a given function or relation.

Algebra & Analytical Methods	Students will be able to graph linear equalities and inequalities.	8.B.5,8.C.5	Math Matters 3	Students graph linear equalities and inequalities.
Algebra & Analytical Methods	Students will learn to solve linear equalities and inequalities using graphs.	8.B.5, 8.C.5	Math Matters 3	Students will solve linear equalities and inequalities using graphs.
Algebra & Analytical Methods	Students will learn to solve linear equalities and inequalities using equation solving methods.	8.B.5	Math Matters 3	Students will solve linear equalities and inequalities using equation solving methods.
Algebra & Analytical Methods	Students will analyze the effects of changes in coefficients on parent graphs.	8.C.4	Math Matters 3	Students will graph equations based on changes to the parent graph.
Algebra & Analytical Methods	Students will learn to solve quadratic equations using various techniques.	8.A.5,8.B.5, 8.D.5	Math Matters 3	Students will solve quadratic equations using various techniques.
Algebra & Analytical Methods	Students will learn to graph quadratic equations.	8.D.4	Math Matters 3	Students will graph quadratic equations.
Algebra & Analytical Methods	Students will explore the impact of changes to the basic quadratic equations.	8.C.4	Math Matters 3	Students will graph quadratic equations using relationship to parent graph.
Algebra & Analytical Methods	Students will learn to graph circles.	8.B.4a	Math Matters 3	Students will graph circles using the equation.
Geometry	Students will review relationships between parts of a circle; secant and tangent lines.	9.B.4	Math Matters 3	Students will demonstrate knowledge of the relationships of parts of a circle; secant and tangent lines.
Algebra & Analytical Methods	Students will learn to graph an ellipse.	8.B.4a	Math Matters 3	Students will graph an ellipse using the equation.
Number Sense and Algebra & Analytical Methods	Students will learn to perform simple matrix operations.	6.B.4, 8.C.4	Math Matters 3	Students will perform simple matrix operations.

Number Sense	Students will learn about complex numbers.	6.A.5	Math Matters 3	Students will perform basic operations on complex numbers.
Algebra & Analytical Methods and Geometry	Students will learn how to solve a Right Triangle.	8.B.5,9.D.4	Math Matters 3	Students will solve a Right Triangle.
Algebra & Analytical Methods and Geometry	Student will apply ratios and proportions using trigonometry.	8.B.5,9.D.5	Math Matters 3	Student will use trigonometry to model ratios and proportions.
Number Sense	Students will study different types of sequences and series.	6.C.5,6.D.5	Math Matters 3	Students will apply types of sequences and series to real world situations.
Data Analysis	Students will use examples to model basic probability rules.	10.C.3,10.C.4	Math Matters 3	Students will interpret experiments using basic probability rules.
Data Analysis	Students will explore basic statistics.	10.A.4a-4c	Math Matters 3	Students will calculate basic statistics including measures of central tendency and dispersion.
Data Analysis	Students will learn how data is collected and used.	10.A.4b	Math Matters 3	Students will collect data and calculate relevant statistics.
Measurement and Geometry	Students will use problem solving methods in applications involving area, volume, perimeter and trigonometry.	7.B.5,9.A.5	Math Matters 3	Students will solve problems involving area, volume, perimeter and trigonometry.
Geometry	Students will analyze the effects of changes in one measurement impacts area and volume.	9.A.5	Math Matters 3	Students will predict changes to area and volume based on given changes in measurement.
Measurement	Students will learn basic constructions using compass, protractor, straight edge.	7.B.5	Math Matters 3	Students will construct basic geometric shapes using compass, protractor, straight edge.

<b>Curriculum Heading</b>	<b>Curriculum Statement</b>	<b>Aligned State Standard</b>	<b>Teacher Resources</b>	<b>Performance Indicator</b>
Number Sense and Estimation & Measurement	Students will learn about real numbers and number operations.	6.A.5; 7.C.5	McDougal Text	Students will graph real numbers on the number line and identify the properties of real numbers in operations.
Number Sense and Algebra & Analytical Methods	Students will learn about algebraic expressions.	6.A.5; 8.A.5; 8.C.5	McDougal Text	Students will evaluate algebraic expressions and be able to simplify algebraic expressions by combining like terms.
Algebra & Analytical Methods	Students will learn about linear equations.	8.C.5	McDougal Text	Students will solve linear equations and use linear equations to solve real life problems.
Algebra & Analytical Methods	Students will learn how to rewrite equations and formulas.	8.C.5	McDougal Text	Students will solve equations for the desired variable asked for in equations and in formulas.
Algebra & Analytical Methods and Geometry	Students will learn some problem solving techniques.	8.C.5; 9.A.5	McDougal Text	Students will be able to solve real life problems by using a general problem solving plan.
Number Sense	Students will learn about linear inequalities.	6.A.5	McDougal Text	Students will be able to solve simple inequalities and also compound inequalities.
Number Sense	Students will learn about absolute value equations and inequalities.	6.A.5	McDougal Text	Students will be able to solve absolute value equations and inequalities.
Algebra & Analytical Methods	Students will learn about functions.	8.B.5; 8.C.5	McDougal Text	Students will be able to represent relations and functions and graph and evaluate linear functions.
Number Sense, Algebra & Analytical Methods, and Geometry	Students will learn about slope and rate of change.	6.D.5; 8.C.5; 9.A.5	McDougal Text	Students will be able to find slopes of lines and classify parallel and perpendicular lines.
Algebra & Analytical Methods	Students will learn about the graphs of linear equations.	8.B.5	McDougal Text	Students will graph linear equations that are in slope intercept form and standard form.
Algebra & Analytical Methods	Students will learn about the equations of lines.	8.B.5	McDougal Text	Students will write linear equations given a variety of different information.



Data Analysis & Probability	Students will learn how to fit a line to a set of data.	10.A.5	McDougal Text	Students will have to use a scatter plot to identify and approximate the best fitting line for a set of data.
Algebra & Analytical Methods	Students will learn about linear inequalities in two variables.	8.B.5; 8.D.5	McDougal Text	Students will graph linear equations in two variables.
Algebra & Analytical Methods	Students will learn about absolute value functions.	8.B.5; 8.D.5	McDougal Text	Students will represent absolute value functions by graphing them.
Algebra & Analytical Methods	Students will learn about systems of linear equations.	8.A.5; 8.D.5	McDougal Text	Students will graph systems of linear equations to find the solution.
Algebra & Analytical Methods	Students will learn about systems of equations.	8.B.5	McDougal Text	Students will use algebraic methods to solve linear systems.
Algebra & Analytical Methods	Students will learn about systems of linear inequalities.	8.B.5; 8.C.5	McDougal Text	Students will graph systems of linear inequalities to find the solutions.
Algebra & Analytical Methods	Students will learn what linear programming does.	8.B.5; 8.D.5	McDougal Text	Students will solve linear programming problems.
Algebra & Analytical Methods	Students will learn about three equations in three variables.	8.B.5; 8.C.5	McDougal Text	Students will graph linear equations in three variables and evaluate linear functions in two variables.
Algebra & Analytical Methods	Students will learn about systems of equations with three variables.	8.B.5; 8.C.5	McDougal Text	Students will solve systems of equations in three variables algebraically.
Number Sense and Algebra & Analytical Methods	Students will learn about matrix operations.	6.A.5; 6.B.5; 8.C.5	McDougal Text	Students will learn how to add, subtract and solve matrix equations.
Number Sense and Algebra & Analytical Methods	Students will learn about matrix multiplication.	6.A.5; 6.B.5; 8.C.5	McDougal Text	Students will multiply two matrices.
Number Sense	Students will learn about determinants and Cramer's Rule.	6.A.5; 6.B.5	McDougal Text	Students will find the determinant of 2x2 and 3x3 matrices, then apply this information to solve systems using Cramer's Rule.
Number Sense and Algebra & Analytical Methods	Students will learn about the Identity and Inverse Matrices.	6.B.5; 8.C.5	McDougal Text	Students will find and use Identity and inverse matrices to solve matrix equations.
Number Sense and Algebra & Analytical Methods	Students will learn about solving systems of equations using Inverse Matrices.	6.B.5; 8.C.5	McDougal Text	Students will solve systems of linear equations by using inverse matrices.
Number Sense and Algebra & Analytical Methods	Students will learn about quadratic equations.	6.B.5; 8.C.5	McDougal Text	Students will graph quadratic functions.

Algebra & Analytical Methods	Students will learn how to find solutions to quadratic equations.	8.A.5; 8.C.5; 8.D.5	McDougal Text	Students will find solutions to quadratic equations by factoring the quadratic equation.
Algebra & Analytical Methods	Students will learn how to find solutions to quadratic equations.	8.A.5; 8.D.5	McDougal Text	Students will find solutions to quadratic equations by finding square roots.
Number Sense and Algebra & Analytical Methods	Students will learn about complex numbers.	6.A.5; 6.B.5; 8.A.5	McDougal Text	Students will add, subtract, multiply, and divide complex numbers.
Algebra & Analytical Methods	Students will learn more about quadratic equations.	8.A.5; 8.B.5	McDougal Text	Students will solve quadratic equations by completing the square.
Algebra & Analytical Methods	Students will learn more about quadratic equations.	8.A.5; 8.B.5; 8.D.5	McDougal Text	Students will solve quadratic equations by using the Quadratic Formula.
Algebra & Analytical Methods	Students will learn about quadratic inequalities.	8.B.5; 8.C.5	McDougal Text	Students will graph quadratic inequalities in two variables and solve quadratic inequalities in one variable.
Algebra & Data Analysis	Students will learn to model with quadratic functions.	8.B.5; 8.D.5; 10.A.5	McDougal Text	Students will write quadratic functions given certain characteristics of their groups.
Number Sense	Students will learn about properties of exponents.	6.A.5; 6.B.5	McDougal Text	Students will evaluate and simplify expressions involving powers. They will use exponents to solve problems.
Algebra & Analytical Methods	Students will learn about polynomial functions.	8.B.5; 8.C.5	McDougal Text	Students will evaluate and graph polynomial functions.
Number Sense	Students will learn about operations with polynomials.	6.B.5; 6.D.5	McDougal Text	Students will add, subtract and multiply polynomials.
Algebra & Analytical Methods	Students will learn how to solve polynomial functions.	8.A.5; 8.D.5	McDougal Text	Students will factor polynomial expressions and use factoring to solve polynomial equations.
Number Sense and Algebra & Analytical Methods	Students will learn about the remainder and factor theorems.	6.B.5; 8.D.5	McDougal Text	Students will divide polynomials by long and synthetic divisions.
Algebra & Geometry	Students will learn about rational zeros.	8.B.5; 8.C.5; 9.B.5	McDougal Text	Students will have to find the rational zeros of a polynomial function.
Number Sense and Algebra & Analytical Methods	Students will learn about the Fundamental Theorem of Algebra.	6.A.5; 8.A.5; 8.B.5	McDougal Text	Students will have to determine the number of zeros of a polynomial function and approximate the real zeros.

Number Sense	Students will learn about nth roots and rational exponents.	6.A.5; 6.B.5	McDougal Text	Students will evaluate the nth roots using both radical and rational exponent notation.
Number Sense	Students will learn about the properties of rational exponents.	6.B.5	McDougal Text	Students will evaluate and simplify expressions using properties of exponents.
Number Sense and Algebra & Analytical Methods	Students will learn about the power functions.	6.D.5; 8.B.5	McDougal Text	Students will perform operations with functions where they will add, subtract, multiply, and divide.
Algebra & Analytical Methods	Students will learn about inverse functions.	8.B.5, 8.C.5; 8.D.5	McDougal Text	Students will have to find inverses of linear and non linear functions.
Algebra & Analytical Methods	Students will learn about radical equations.	8.B.5; 8.D.5	McDougal Text	Students will solve equations that contain radicals of rational exponents.
Data Analysis & Probability	Students will learn about statistical graphs.	10.A.5	McDougal Text	Students will describe data using box and whisker plots and histograms.
Algebra & Analytical Methods	Students will learn about exponential equations.	8.B.5	McDougal Text	Students will graph exponential equations.
Number Sense and Algebra & Analytical Methods	Students will learn about $e$ .	6.D.5; 8.B.5	McDougal Text	Students will use the number $e$ as the base of exponential functions.
Algebra & Analytical Methods	Students will learn about the logarithmic functions.	8.B.5; 8.D.5	McDougal Text	Students will evaluate and graph logarithmic functions.
Number Sense and Algebra & Analytical Methods	Students will learn about the properties of logs.	6.A.5; 6.B.5; 8.D.5	McDougal Text	Students will use properties of logs and apply them.
Algebra & Analytical Methods	Students will learn about exponential equations.	8.A.5; 8.B.5	McDougal Text	Students will solve exponential equations.
Number Sense	Students will learn to do operations with rational expressions.	6.A.5; 6.B.5	McDougal Text	Students will multiply and divide rational expressions.
Number Sense	Students will learn about rational equations.	6.A.5; 6.B.5	McDougal Text	Students will add and subtract rational expressions.
Algebra & Analytical Methods	Students will learn about rational equations.	8.A.5; 8.C.5; 8.D.5;	McDougal Text	Students will solve rational expressions.
Number Sense & Geometry	Students will learn about the distance and midpoint of a segment.	6.B.5; 9.A.5	McDougal Text	Students will find the distance and the midpoint of the line segment connecting two points.

Algebra & Analytical Methods	Students will learn about parabolas.	8.B.5; 8.D.5	McDougal Text	Students will graph parabolas to find solutions to some quadratic equations.
Algebra & Analytical Methods and Geometry	Students will learn about circles.	8.B.5; 9.A.5	McDougal Text	Students will graph circles to find the solutions of some quadratic equations.
Algebra & Analytical Methods	Students will learn about ellipses.	8.B.5; 8.D.5	McDougal Text	Students will graph ellipses to find the solutions of some quadratic equations.
Algebra & Analytical Methods	Students will learn about hyperbolas.	8.B.5; 8.D.5	McDougal Text	Students will graph hyperbolas to find the solutions of some quadratic equations.
Number Sense and Algebra & Analytical Methods	Students will learn about quadratic systems.	6.B.5; 8.D.5	McDougal Text	Students will solve quadratic systems by graphing and by algebraic work.
Number Sense and Algebra & Analytical Methods	Students will learn about sequences and series.	6.B.5; 8.A.5	McDougal Text	Students will have to use and be able to write sequences to find the sum of series.
Number Sense and Algebra & Analytical Methods	Students will learn about different sequences and series.	6.A.5; 8.A.5;	McDougal Text	Students will find arithmetic sequences and will find the sum of the arithmetic sequences.
Number Sense and Algebra & Analytical Methods	Students will learn about other types of sequences and series.	6.A.5; 8.A.5;	McDougal Text	Students will find geometric sequences and will find the sum of the geometric series.
Number Sense and Algebra & Analytical Methods	Students will learn more about series.	6.A.5; 6.D.5; 8.A.5	McDougal Text	Students will find the sum of infinite geometric series.
Algebra & Analytical Methods	Students will learn about counting principles.	8.A.5; 8.C.5; 8.D.5	McDougal Text	Students will be able to find the number of ways an event can happen by using the counting principle and permutations.
Number Sense and Data Analysis & Probability	Students will learn about combinations.	6.B.5; 10.A.5	McDougal Text	Students will use combinations to count the number of ways an event can happen.
Number Sense	Students will learn what the Binomial Theorem does.	6.A.5; 6.B.5	McDougal Text	Students will use the Binomial Theorem in order to take any binomial to any power.
Number Sense and Data Analysis & Probability	Students will learn about probability.	6.C.5; 10.C.5	McDougal Text	Students will find experimental and geometric probabilities.

Data Analysis & Probability	Students will learn about the probability of compound events.	10.C.5	McDougal Text	Students will find the probabilities of unions and intersections of two events.
Data Analysis & Probability	Students will learn about the probability of independent and dependent events.	10.C.5	McDougal Text	Students will find the probabilities of independent and dependent events.
				Algebra 2 Enriched and Algebra 2 Regular will use the same book. The book is set up for 3 levels of Algebra 2. We will use the assignments, tests, and quizzes for the regular kids in the level A set up in the book. For the enriched classes we will use the level C portion of the book.

<b>Curriculum Heading</b>	<b>Curriculum Statement</b>	<b>Aligned State Standard</b>	<b>Teacher Resources</b>	<b>Performance Indicator</b>
Algebra & Analytical Methods	Students will learn about three equations in three variables.	8.B.5; 8.C.5	Essentials of College Algebra	Students will graph linear equations in three variables and evaluate linear functions in two variables.
Algebra & Analytical Methods	Students will learn about systems of equations with three variables.	8.B.5; 8.C.5	Essentials of College Algebra	Students will solve systems of equations in three variables algebraically.
Number Sense and Algebra & Analytical Methods	Students will learn about matrix operations.	6.A.5; 6.B.5; 8.C.5	Essentials of College Algebra	Students will learn how to add, subtract and solve matrix equations.
Number Sense and Algebra & Analytical Methods	Students will learn about matrix multiplication.	6.A.5; 6.B.5; 8.C.5	Essentials of College Algebra	Students will multiply two matrices.
Number Sense	Students will learn about determinants and Cramer's Rule.	6.A.5; 6.B.5	Essentials of College Algebra	Students will find the determinant of 2x2 and 3x3 matrices, then apply this information to solve systems using Cramer's Rule.
Number Sense and Algebra & Analytical Methods	Students will learn about the Identity and Inverse Matrices.	6.B.5; 8.C.5	Essentials of College Algebra	Students will find and use Identity and Inverse matrices to solve matrix equations.
Number Sense and Algebra & Analytical Methods	Students will learn about solving systems of equations using Inverse Matrices.	6.B.5; 8.C.5	Essentials of College Algebra	Students will solve systems of linear equations by using inverse matrices.
Number Sense and Algebra & Analytical Methods	Students will learn about quadratic equations.	6.B.5; 8.C.5	Essentials of College Algebra	Students will graph quadratic functions.
Algebra & Analytical Methods	Students will learn how to find solutions to quadratic equations.	8.A.5; 8.C.5; 8.D.5	Essentials of College Algebra	Students will find solutions to quadratic equations by factoring the quadratic equation.

Algebra & Analytical Methods	Students will learn how to find solutions to quadratic equations.	8.A.5; 8.D.5	Essentials of College Algebra	Students will find solutions to quadratic equations by finding square roots.
Number Sense and Algebra & Analytical Methods	Students will learn about complex numbers.	6.A.5; 6.B.5; 8.A.5	Essentials of College Algebra	Students will add, subtract, multiply, and divide complex numbers.
Algebra & Analytical Methods	Students will learn more about quadratic equations.	8.A.5; 8.B.5	Essentials of College Algebra	Students will solve quadratic equations by completing the square.
Algebra & Analytical Methods	Students will learn more about quadratic equations.	8.A.5; 8.B.5; 8.D.5	Essentials of College Algebra	Students will solve quadratic equations by using the Quadratic Formula.
Algebra & Analytical Methods	Students will learn about quadratic inequalities.	8.B.5; 8.C.5	Essentials of College Algebra	Students will graph quadratic inequalities in two variables and solve quadratic inequalities in one variable.
Algebra & Data Analysis	Students will learn to model with quadratic functions.	8.B.5; 8.D.5; 10.A.5	Essentials of College Algebra	Students will write quadratic functions given certain characteristics of their groups.
Number Sense	Students will learn about properties of exponents.	6.A.5; 6.B.5	Essentials of College Algebra	Students will evaluate and simplify expressions involving powers. They will use exponents to solve problems.
Algebra & Analytical Methods	Students will learn about polynomial functions.	8.B.5; 8.C.5	Essentials of College Algebra	Students will evaluate and graph polynomial functions.
Number Sense	Students will learn about operations with polynomials.	6.B.5; 6.D.5	Essentials of College Algebra	Students will add subtract and multiply polynomials.
Algebra & Analytical Methods	Students will learn how to solve polynomial functions.	8.A.5; 8.D.5	Essentials of College Algebra	Students will factor polynomial expressions and use factoring to solve polynomial equations.
Number Sense and Algebra & Analytical Methods	Students will learn about the remainder and factor theorems.	6.B.5; 8.D.5	Essentials of College Algebra	Students will divide polynomials by long and synthetic divisions.
Algebra & Geometry	Students will learn about rational zeros.	8.B.5; 8.C.5; 9.B.5	Essentials of College Algebra	Students will have to find the rational zeros of a polynomial function.

Number Sense and Algebra & Analytical Methods	Students will learn about the Fundamental Theorem of Algebra.	6.A.5; 8.A.5; 8.B.5	Essentials of College Algebra	Students will have to determine the number of zeros of a polynomial function and approximate the real zeros.
Number Sense	Students will learn about nth roots and rational exponents.	6.A.5; 6.B.5	Essentials of College Algebra	Students will evaluate the nth roots using both radical and rational exponent notation.
Number Sense	Students will learn about the properties of rational exponents.	6.B.5	Essentials of College Algebra	Students will evaluate and simplify expressions using properties of exponents.
Number Sense and Algebra & Analytical Methods	Students will learn about the power functions.	6.D.5; 8.B.5	Essentials of College Algebra	Students will perform operations with functions where they will add, subtract, multiply, and divide.
Algebra & Analytical Methods	Students will learn about inverse functions.	8.B.5, 8.C.5; 8.D.5	Essentials of College Algebra	Students will have to find inverses of linear and non linear functions.
Number Sense and Estimation & Measurement	Students will learn about real numbers and number operations.	6.A.5; 7.C.5	Essentials of College Algebra	Students will graph real numbers on the number line and identify the properties of real numbers in operations.
Number Sense and Algebra & Analytical Methods	Students will learn about algebraic expressions.	6.A.5; 8.A.5; 8.C.5	Essentials of College Algebra	Students will evaluate algebraic expressions and be able to simplify algebraic expressions by combining like terms.
Algebra & Analytical Methods	Students will learn about linear equations.	8.C.5	Essentials of College Algebra	Students will solve linear equations and use linear equations to solve real life problems.
Number Sense	Students will learn about linear inequalities.	6.A.5	Essentials of College Algebra	Students will be able to solve simple inequalities and also compound inequalities.
Algebra & Analytical Methods	Students will learn about functions.	8.B.5; 8.C.5	Essentials of College Algebra	Students will be able to represent relations and functions and graph and evaluate linear functions.
Algebra & Analytical Methods	Students will learn about the graphs of linear equations.	8.B.5	Essentials of College Algebra	Students will graph linear equations that are in slope intercept form and standard form.
Algebra & Analytical Methods	Students will learn about linear inequalities in two variables.	8.B.5; 8.D.5	Essentials of College Algebra	Students will graph linear equations in two variables.



Algebra & Analytical Methods	Students will learn about systems of linear equations.	8.A.5; 8.D.5	Essentials of College Algebra	Students will graph systems of linear equations to find the solution.
Algebra & Analytical Methods	Students will learn about systems of equations.	8.B.5	Essentials of College Algebra	Students will use algebraic methods to solve linear systems.
Algebra & Analytical Methods	Students will learn about systems of linear inequalities.	8.B.5; 8.C.5	Essentials of College Algebra	Students will graph systems of linear inequalities to find the solutions.
Algebra & Analytical Methods	Students will learn about radical equations.	8.B.5; 8.D.5	Essentials of College Algebra	Students will solve equations that contain radicals of rational exponents.
Algebra & Analytical Methods	Students will learn about exponential equations.	8.B.5	Essentials of College Algebra	Students will graph exponential equations.
Number Sense and Algebra & Analytical Methods	Students will learn about $e$ .	6.D.5; 8.B.5	Essentials of College Algebra	Students will use the number $e$ as the base of exponential functions.
Algebra & Analytical Methods	Students will learn about the logarithmic functions.	8.B.5; 8.D.5	Essentials of College Algebra	Students will evaluate and graph logarithmic functions.
Number Sense and Algebra & Analytical Methods	Students will learn about the properties of logs.	6.A.5; 6.B.5; 8.D.5	Essentials of College Algebra	Students will use properties of logs and apply them.
Algebra & Analytical Methods	Students will learn about exponential equations.	8.A.5; 8.B.5	Essentials of College Algebra	Students will solve exponential equations.
Number Sense	Students will learn to do operations with rational expressions.	6.A.5; 6.B.5	Essentials of College Algebra	Students will multiply and divide rational expressions.
Number Sense	Students will learn about rational equations.	6.A.5; 6.B.5	Essentials of College Algebra	Students will add and subtract rational expressions.
Algebra & Analytical Methods	Students will learn about rational equations.	8.A.5; 8.C.5; 8.D.5;	Essentials of College Algebra	Students will solve rational expressions.

Number Sense & Geometry	Students will learn about the distance and midpoint of a segment.	6.B.5; 9.A.5	Essentials of College Algebra	Students will find the distance and the midpoint of the line segment connecting two points.
Algebra & Analytical Methods	Students will learn about parabolas.	8.B.5; 8.D.5	Essentials of College Algebra	Students will graph parabolas to find solutions to some quadratic equations.
Algebra & Analytical Methods	Students will learn about ellipses.	8.B.5; 8.D.5	Essentials of College Algebra	Students will graph ellipses to find the solutions of some quadratic equations.
Algebra & Analytical Methods	Students will learn about hyperbolas.	8.B.5; 8.D.5	Essentials of College Algebra	Students will graph hyperbolas to find the solutions of some quadratic equations.
Number Sense and Algebra & Analytical Methods	Students will learn about quadratic systems.	6.B.5; 8.D.5	Essentials of College Algebra	Students will solve quadratic systems by graphing and by algebraic work.
Number Sense and Algebra & Analytical Methods	Students will learn about sequences and series.	6.B.5; 8.A.5	Essentials of College Algebra	Students will have to use and be able to write sequences to find the sum of series.
Number Sense and Algebra & Analytical Methods	Students will learn about different sequences and series.	6.A.5; 8.A.5;	Essentials of College Algebra	Students will find arithmetic sequences and will find the sum of the arithmetic sequences.
Number Sense and Algebra & Analytical Methods	Students will learn about other types of sequences and series.	6.A.5; 8.A.5;	Essentials of College Algebra	Students will find geometric sequences and will find the sum of the geometric series.
Number Sense and Algebra & Analytical Methods	Students will learn more about series.	6.A.5; 6.D.5; 8.A.5	Essentials of College Algebra	Students will find the sum of infinite geometric series.
Algebra & Analytical Methods	Students will learn about counting principles.	8.A.5; 8.C.5; 8.D.5	Essentials of College Algebra	Students will be able to find the number of ways an event can happen by using the counting principle and permutations.

<b>Curriculum Heading</b>	<b>Curriculum Statement</b>	<b>Aligned State Standard</b>	<b>Teacher Resources</b>	<b>Performance Indicator</b>
Algebra & Analytical Methods	Students will explore the definitions of relations and functions.	8.D.2	Prentice-Hall Text	Students will be able to identify a relation vs. a function using both the definition of a function and the vertical line test.
Algebra & Analytical Methods	Students will learn about the relationship of an inverse to the original function.	8.C.3	Prentice-Hall Text	Students will find and/or graph the inverse of a function. They will also be able to use the Horizontal Line test.
Algebra & Analytical Methods	Students will review slope.	8.D.3a	Prentice-Hall Text	Students will determine the slope of a line.
Algebra & Analytical Methods	Students will review distance.	8.D.3a	Prentice-Hall Text	Students will be able to use the distance formula.
Algebra & Analytical Methods	Students will learn about different forms of linear equations.	8.D.4	Prentice-Hall Text	Students will write various forms of a linear equation.
Number Sense	Students will learn about inequalities and convex sets.	8.D.3a; 8.D.4	Prentice-Hall Text	Students will graph linear inequalities in two variables.
Algebra & Analytical Methods	Students will learn to apply skills to solve problems.	8.D	Prentice-Hall Text	Students will solve a linear programming problem.
Algebra & Analytical Methods	Students will study quadratic equations.	8.D.4	Prentice-Hall Text	Students will find and identify roots of quadratic equations. They will also identify the roots as real or imaginary.
Number Sense and Algebra & Analytical Methods	Students will learn synthetic division.	6.B.5; 8.D.5	Prentice-Hall Text	Students will use the synthetic division technique to isolate roots.
Number Sense	Students will study fundamental theorems of Algebra.	6.B	Prentice-Hall Text	Students will use the remainder and factor theorems to find and confirm roots of an equation.
Number Sense and Algebra & Analytical Methods	Students will learn different techniques to find roots.	6.A.5; 8.A.5; 8.B.5	Prentice-Hall Text	Students will determine the number of rational roots possible using the Rational Root Theorem.
Geometry	students will learn about the derivative.	8.A	Prentice-Hall Text	Students will find the derivative using the following methods: Formal, Alternate and Theorems.
Calculus	Students will learn about critical points.		Prentice-Hall Text	Students will use the derivative to isolate critical points of a function.

Calculus	Students will explore different tests for critical points.		Prentice-Hall Text	Students will use the neighborhood test to confirm the type of critical point.
Number Sense and Algebra & Analytical Methods	Students will review sequences and series.	6.B.5; 8.A.5	Prentice-Hall Text	Students will be able to identify a series as either arithmetic or geometric and solve the problems accordingly.
Algebra & Analytical Methods	Students will see infinite series.	8.C	Prentice-Hall Text	Students will sum an infinite series.
Algebra & Analytical Methods	Students will explore alternate ways to expand equations.	8.A	Prentice-Hall Text	Students will expand a polynomial using the binomial theorem.
Algebra & Analytical Methods	Students will study inverses.	8.C.3	Prentice-Hall Text	Students will be able to prove the two functions are inverses of each other.
Algebra & Analytical Methods	Students will explore functional notation.	8.B	Prentice-Hall Text	Students will perform operations with functions.
Algebra & Analytical Methods	Students will review rational exponents.	8.D	Prentice-Hall Text	Students will use rational exponents to write expressions.
Algebra & Analytical Methods	Students will learn to graph exponential functions.	8.D	Prentice-Hall Text	Students will graph exponential functions.
Algebra & Analytical Methods	Students will study logarithms.	8.D	Prentice-Hall Text	Students will use natural and common logarithms to solve equations.
Algebra & Analytical Methods	Students will learn to graph logarithmic functions.	8.D	Prentice-Hall Text	Students will graph logarithmic functions.
Calculus	Students will explore continuity.		Prentice-Hall Text	Students will justify continuity at a given point.
Calculus	Students will explore continuity.		Prentice-Hall Text	Students will identify the type of discontinuity in a graph.
Calculus	Students will learn about limits.		Prentice-Hall Text	Students will find limits by graphing, by using algebra and by neighborhood tests.
Algebra & Analytical Methods	Students will examine properties of rational functions.	8.B	Prentice-Hall Text	Students will graph rational functions.
Number Sense	Students will review matrices.	6.D.4	Prentice-Hall Text	Students will perform matrix operations.
Number Sense	Students will learn about inverse matrices.	6.D.4	Prentice-Hall Text	Students will use the inverse to solve matrix and linear equations.
Number Sense	Students will learn about the use of the derivative.	6.D	Prentice-Hall Text	Students will use the derivative to solve various real world problems.
Number Sense, Algebra & Analytical Methods, and Geometry	Students will learn about the equations of lines.	6.D.5; 8.C.5; 9.A.5	Prentice-Hall Text	Students will write the equations of lines parallel and/or perpendicular to a given line.

Calculus	Students will learn about different forms of linear equations.		Prentice-Hall Text	Students will write the equations of a line tangent to a curve at a given point.
Algebra & Analytical Methods	Students will explore changes to graphs of parent families.	8.B	Prentice-Hall Text	Students will use translations to graph variations of the graph of a parent family.
Algebra & Analytical Methods	Students will learn about parametric equations.	8.C	Prentice-Hall Text	Students will use parametric equations to solve problems.
Algebra & Analytical Methods	Students will study vectors.	8.C.4b	Prentice-Hall Text	Students will evaluate the amplitude and magnitude of a vector.
Algebra & Analytical Methods	Students will learn about vectors.	8.C.4b	Prentice-Hall Text	Students will be able to perform vector operations both geometrically and algebraically.
Algebra & Analytical Methods	Students will learn how to find the cross product of two vectors.	8.C.4b	Prentice-Hall Text	Students will use cross products to find a vector perpendicular to two given vectors in space.
Geometry	Students will be introduced to basic triangle trigonometry.	9.D.4	Prentice-Hall Text	Students will express trigonometric ratios as fractions or decimals.
Estimation & Measurement	Students will learn different ways to measure angles.	7.A	Prentice-Hall Text	Students will convert angle measures from radians to degrees and vice versa.
Geometry	Students will be introduced to circular functions.	9.B	Prentice-Hall Text	Students will explain trigonometry as a circular function.
Geometry	Students will learn identities.	9	Prentice-Hall Text	Students will use trigonometric identities to transform expressions.
Algebra & Analytical Methods	Students will be introduced to basic trig graphs.	8	Prentice-Hall Text	Students will use trigonometric functions to model periodic phenomena.
Geometry	Students will explore various ways to solve triangles.	9.D.4	Prentice-Hall Text	Students will solve nonright triangles by using the Law of Sine, Cosines or Tangents.
Geometry	Students will study various trigonometric identities.	9.B.4	Prentice-Hall Text	Students will use sum and difference identities to find exact values of trigonometric function.
Geometry	Students will find exact values of angles.	9.B.4	Prentice-Hall Text	Students will use double and half angle identities to find exact values.
Geometry	Students will explore trig as a circular function.	9.B.4	Prentice-Hall Text	Students will replicate the wheel and use it to solve basic trigonometric functions.
Geometry	Students will study graphing trigonometric equations.	9.A.4b	Prentice-Hall Text	Students will graph the basic trig functions and their inverses.
Geometry	Students will study various ways to produce trigonometric values.	9.B.4	Prentice-Hall Text	Students will answer questions regarding exact trigonometric value without a calculator.

Geometry	Students will learn how to use a calculator to solve various trigonometric functions.	9.A	Prentice-Hall Text	Students will answer questions regarding trig functions and their inverses using a calculator.
Geometry	Students will study area.	9.D	Prentice-Hall Text	Students will find the areas of circular sectors and segments.
Algebra & Analytical Methods	Students will apply the concept of domain and range to trig functions.	8.A	Prentice-Hall Text	Students will be able to identify the domain and range of a trigonometric function.
Algebra & Analytical Methods	Students will study the need for principal values.	8.A	Prentice-Hall Text	Students will recognize and use the principal versus general values of a function.
Geometry	Students will learn about the polar coordinate system.	8.B	Prentice-Hall Text	Students will graph polar points and equation. ( this includes the classic curves)
Geometry	Students will understand how to convert coordinates to polar and rectangular.	8.B	Prentice-Hall Text	Students will convert polar points to rectangular points and vice versa.
Algebra & Analytical Methods	Students will study complex number systems.	8.B	Prentice-Hall Text	Students will simplify complex numbers.
Algebra & Analytical Methods	Students will study use of polar coordinates to simplify complex numbers.	8.C	Prentice-Hall Text	Students will write and graph and perform mathematical computations on complex numbers in polar form.
Calculus	Students will learn about DeMoivre's Theorem.		Prentice-Hall Text	Students will use DeMoivre's theorem to find powers and roots of complex numbers.

<b>Curriculum Heading</b>	<b>Curriculum Statement</b>	<b>Aligned State Standard</b>	<b>Teacher Resources</b>	<b>Performance Indicator</b>
Calculus	Students will collect and review fundamental topics of Algebra and Geometry.	N/A	Prentice-Hall Text	Students will identify fundamental Algebra and Geometry topics and solve equations.
Calculus	Students will understand domain range of functions.	N/A	Prentice-Hall Text	Students will determine the domain and range of multiple types of functions.
Calculus	Students will explore the shifting of graphs.	N/A	Prentice-Hall Text	Students will translate a function horizontally and vertically.
Calculus	Students will learn about trigonometric functions.	N/A	Prentice-Hall Text	Students will identify and graph trigonometric functions.
Calculus	Students will review and expand the concept of a limit.	N/A	Prentice-Hall Text	Students will explain the reasoning behind and describe the process of finding a limit.
Calculus	Students will review the rules for finding the limit of a function.	N/A	Prentice-Hall Text	Students will determine the limits of multiple types of functions.
Calculus	Students will explore the target values and the formal definitions of limits.	N/A	Prentice-Hall Text	Students will recognize the difference between the value and limit of a function throughout the domain of the function.
Calculus	Students will develop the extenuation of the Limit Concept.	N/A	Prentice-Hall Text	Students will relate how the limit of a function applies to the graph of a given function.
Calculus	Students will understand and discuss the concept of continuity.	N/A	Prentice-Hall Text	Students will identify a function or graph of a function as either continuous or discontinuous.
Calculus	Students will apply the tangent and normal to a curve.	N/A	Prentice-Hall Text	Students will find the tangent and normal to a curve by solving for its derivative.
Calculus	Students will apply the different differentiation rules.	N/A	Prentice-Hall Text	Students will solve for the derivatives of functions by using the power, product, and quotient rules.
Calculus	Students will learn how to take the Derivative to a trigonometric function.	N/A	Prentice-Hall Text	Students will determine the derivative of a trigonometric function.
Calculus	Students will be introduced to the Chain Rule.	N/A	Prentice-Hall Text	Students will use the chain rule to solve for the derivatives of more complex functions.

Calculus	Students will be introduced to implicit differentiation.	N/A	Prentice-Hall Text	Students will use implicit differentiation to find the derivatives of functions with multiple variables.
Calculus	Students will be introduced to differentiation of functions with rational exponents.	N/A	Prentice-Hall Text	Students will use the chain rule to solve for the derivatives of functions with rational exponents.
Calculus	Students will explore related rates of change problems.	N/A	Prentice-Hall Text	Students will use derivatives to solve word problems that involve related rates of change.
Calculus	Students will comprehend the applications of the Derivative.	N/A	Prentice-Hall Text	Students will identify and execute at least five applications of the derivative.
Calculus	Students will be introduced to the extreme values of functions.	N/A	Prentice-Hall Text	Students will recognize the extreme values of a function graphically.
Calculus	Students will be introduced to the Mean Value Theorem.	N/A	Prentice-Hall Text	Students will determine the average value of a function over the course of an interval using the MVT.
Calculus	Students will use the first derivative test to find local extreme values.	N/A	Prentice-Hall Text	Students will find the local and extreme values of a function through the first derivative test.
Calculus	Students will graph functions using the first derivative and the second derivative.	N/A	Prentice-Hall Text	Students will sketch the graph of a function through use of the first and second derivative tests.
Calculus	Students will explore the limits of positive and negative infinity.	N/A	Prentice-Hall Text	Students will determine the limits of multiple types of functions as they approach infinity.
Calculus	Students will explore optimization problems.	N/A	Prentice-Hall Text	Students will complete observation problems by application of integrals.
Calculus	Students will comprehend linearization.	N/A	Prentice-Hall Text	Students will estimate the equation of a graph using the linearization process.
Calculus	Students will use integrals to find the initial value of a function.	N/A	Prentice-Hall Text	Students will find the original equation of a function given its derivative.
Calculus	Students will develop the idea and techniques of applying the integral.	N/A	Prentice-Hall Text	Students will identify situations in which integration should be applied.
Calculus	Students will be introduced to indefinite integrals.	N/A	Prentice-Hall Text	Students will determine the value of a function over a specific interval.



Calculus	Students will comprehend differential equations, initial value problems, and mathematical modeling.	N/A	Prentice-Hall Text	Students will apply the methods of differential equations, initial value problems and modeling at appropriate junctures.
Calculus	Students will understand how to apply different integration methods.	N/A	Prentice-Hall Text	Students will determine the integral of a function using multiple methods.
Calculus	Students will learn how to integrate a function by substitution.	N/A	Prentice-Hall Text	Students will find the integral of a function by the substitution method.
Calculus	Students will learn how to integrate a function by parts.	N/A	Prentice-Hall Text	Students will find the integral of a function by the integration by parts method.
Calculus	Students will learn how to integrate a function by partial fractions.	N/A	Prentice-Hall Text	Students will find the integral of a function by the partial fractions method.
Calculus	Students will learn how to integrate a function by using trigonometric substitution.	N/A	Prentice-Hall Text	Students will find the integral of a function by trigonometric substitution.

<b>Curriculum Heading</b>	<b>Curriculum Statement</b>	<b>Aligned State Standard</b>	<b>Teacher Resources</b>	<b>Performance Indicator</b>
Calculus	Students will learn to find the area between curves.	N/A	Prentice-Hall Text	Students will find areas between curves with respect to the x and the y axis.
Calculus	Students will study various ways to find volumes using cross sections, disc, washers and shells.	N/A	Prentice-Hall Text	Students will choose the appropriate method and find the volume of an irregular figure.
Calculus	Students will study applications from work.	N/A	Prentice-Hall Text	Students will demonstrate knowledge of applications to science by presenting to the class.
Calculus	Students will learn to find the surface area of a solid of revolution.	N/A	Prentice-Hall Text	Students will use arc length and formulas to find surface area.
Calculus	Students will learn to calculate the work done when pumping liquids from a container.	N/A	Prentice-Hall Text	Students will set up and solve work problems.
Calculus	Students will study the derivatives of transcendental functions.	N/A	Prentice-Hall Text	Students will choose the appropriate method to find the derivative of transcendental functions.
Calculus	Students will study the integrals of transcendental functions.	N/A	Prentice-Hall Text	Students will choose the appropriate method to find the integrals of transcendental functions.
Calculus	Students will learn to find the limit of indeterminate situations using L'Hopital's rule.	N/A	Prentice-Hall Text	Students will find limits of special case situations.
Calculus	Students will discuss slope fields and their place in calculus.	N/A	Prentice-Hall Text	Students will use First Order Derivatives to solve slope fields.
Calculus	Students will explore the use of logarithms in the real world - i.e. exponential growth and decay.	N/A	Prentice-Hall Text	Students will use differential equations and formulas to answer problems.
Calculus	Students will learn about hyperbolic trig functions.	N/A	Prentice-Hall Text	Students will list importance of hyperbolic trig.

Calculus	Students will explore the capabilities of their calculators with calculus.	N/A	Prentice-Hall Text	Students will use their graphing calculators to find derivatives and integrals.
Calculus	Students will explore various methods to solve a story problem.	N/A	Prentice-Hall Text	Students will read and identify key points of a word problem.
Calculus	Students will explore various sequences and series --- Riemann sums and Taylor series.	N/A	Prentice-Hall Text	Students will use a Riemann sum to partition area under a curve. They will also compare this to the Taylor series.

<b>Curriculum Heading</b>	<b>Curriculum Statement</b>	<b>Aligned State Standard</b>	<b>Teacher Resources</b>	<b>Performance Indicator</b>
Data Analysis & Probability	Students will be introduced to two common meanings of the word "statistics."	10.A.1a	ICC Text	Students will distinguish between two common meanings of the word "statistics."
Data Analysis & Probability	Students will study the three popular criticisms of statistical methodology.	10.A.1a	ICC Text	Students will discuss three popular criticisms of statistical methodology.
Data Analysis & Probability	Students will acquire knowledge about the methods of displaying numerical data in an organized form.	10.A.1a	ICC Text	Students will name at least three methods of displaying numerical data in an organized form.
Data Analysis & Probability	Students will acquire knowledge about the three characteristics of the four levels of numerical scaling of numbers.	10.A.1a; 10.B.1a	ICC Text	Students will define three characteristics for four levels of numerical scaling of numbers.
Data Analysis & Probability	Students will be introduced how to calculate the mean, median and mode of a numbers.	10.A.2b	ICC Text	Students will compute the mean and determine the median and mode for a given set of numbers.
Data Analysis & Probability	Students will comprehend the common characteristics of the mean, median, and mode.	10.A.2b	ICC Text	Students will describe common characteristics of the mean, median, and mode.
Data Analysis & Probability	Students will comprehend what causes misleading graphs or picture charts.	10.A.3c	ICC Text	Students will identify distortions (illusions) in graphs or picture charts.
Data Analysis & Probability	Students will comprehend the construction of bar graphs.	10.A.4a; 10.A.3a	ICC Text	Students will construct a bar graph from given data.
Data Analysis & Probability	Students will understand the differences between a grouped bar graph and a stacked bar graph.	10.A.4a; 10.A.3a	ICC Text	Students will distinguish between a grouped bar graph and a stacked bar graph.
Data Analysis & Probability	Students will comprehend the construction of circle graphs.	10.A.4a; 10.A.3a	ICC Text	Students will construct a circle graph from given data.
Data Analysis & Probability	Students will comprehend the construction of a pictogram.	10.A.4a; 10.A.3a	ICC Text	Students will create a pictogram from given data.
Data Analysis & Probability	Students will understand how to locate the relative positions of the mean, median, and mode on a skewed frequency distribution.	10.A.4b; 10.A.3b	ICC Text	Students will locate the relative positions of the mean, median, and mode on a skewed frequency distribution.
Data Analysis & Probability	Students will learn how to compute the sum of squares of the deviation scores using two methods.	10.A.4b; 10.A.3b	ICC Text	Students will compute the sum of squares of the deviation scores using two methods.
Data Analysis & Probability	Students will understand how to calculate the variance of a set of numbers.	10.A.4b; 10.A.3b	ICC Text	Students will calculate the variance of a set of numbers.

Data Analysis & Probability	Students will understand how to calculate the standard deviation from a given value of the variance for a variable.	10.A.4b; 10.A.3b	ICC Text	Students will determine the standard deviation from a given value of the variance for a variable.
Data Analysis & Probability	Students will explore how the measures of dispersion differ from measures of central tendency.	10.A.4b; 10.A.3b	ICC Text	Students will describe how measures of dispersion differ from measures of central tendency.
Data Analysis & Probability	Students will be introduced to the role of measures of dispersion in summarizing data.	10.A.4b; 10.A.3b	ICC Text	Students will describe the role of measures of dispersion in summarizing data.
Data Analysis & Probability	Students will explore z-score and T-score numerical distributions.	10.A.4b; 10.A.3b	ICC Text	Students will describe, in terms of the mean and standard deviation, z-score and T-score numerical distributions.
Data Analysis & Probability	Students will understand how to transform a raw set of data into corresponding standard z-scores.	10.A.4b; 10.A.3b	ICC Text	Students will given a set of raw scores, transform them into corresponding standard z-scores.
Data Analysis & Probability	Students will understand how to convert a set of z-scores into a distribution of T-scores.	10.A.4b; 10.A.3b	ICC Text	Students will convert a set of z-scores into a distribution of T-scores.
Data Analysis & Probability	Students will understand how to convert a set of z-scores into a distribution of standard scores.	10.A.4b; 10.A.3b	ICC Text	Students will convert a set of z-scores into a distribution of standard scores with any given mean and standard deviation.
Data Analysis & Probability	Students will comprehend the meaning of an individual standard score relative to the distribution of concern.	10.A.4b; 10.A.3b	ICC Text	Students will interpret the meaning of an individual standard score relative to the distribution of concern.
Data Analysis & Probability	Students will understand how to convert the z-scores using characteristics of a normal curve into percentile equivalents.	10.A.4b; 10.A.3b	ICC Text	Students will be given a set of z-scores and using characteristics of the normal curve, convert the z-scores into percentile equivalents.
Data Analysis & Probability	Students will understand how to find the percentile of a standard z-score given a percentile score and the normal curve.	10.A.4b; 10.A.3b	ICC Text	Students will be given a percentile score and using the characteristics of the normal curve, transform the percentile to a standard z-score.
Data Analysis & Probability	Students will learn how to calculate the mean and standard deviation of a binomial distribution.	10.A.4b; 10.A.3b	ICC Text	Students will calculate the mean and standard deviation of a binomial distribution.

Data Analysis & Probability	Students will comprehend how to translate information about a confidence interval around a mean into a probability statement.	10.A.4b; 10.A.3b	ICC Text	Students will translate information about a confidence interval around a mean into a probability statement.
Data Analysis & Probability	Students will study enumeration of sample spaces and binomial expansion.	10.A.4c	ICC Text	Students will compute binomial probabilities by enumeration of sample spaces and by examination of terms of a binomial expansion.
Data Analysis & Probability	Students will explore the origin of binomial coefficients.	10.A.4c	ICC Text	Students will determine binomial coefficients using a formula or using Pascal's triangle when appropriate.
Data Analysis & Probability	Students will explore real or hypothetical examples of routine daily experiences with statistics.	10.B.1c	ICC Text	Students will provide real or hypothetical examples of routine daily experiences with statistics.
Data Analysis & Probability	Students will be introduced to the construction of an ogive.	10.B.2b	ICC Text	Students will construct an ogive given a relative cumulative frequency distribution.
Data Analysis & Probability	Students will acquire knowledge about the plotting of points on a scattergram when given a bivariate distribution.	10.B.2b	ICC Text	Students will plot points on a scattergram when given a bivariate distribution.
Data Analysis & Probability	Students will understand how to organize data into a frequency distribution table.	10.B.2b; 10.A.2a	ICC Text	Students will organize original data into a frequency distribution table.
Data Analysis & Probability	Students will be introduced to the differences between grouped and ungrouped frequency distributions.	10.B.2b; 10.A.2a	ICC Text	Students will distinguish between grouped and ungrouped frequency distributions.
Data Analysis & Probability	Students will explore joint frequency contingency tables.	10.B.2b; 10.A.2a	ICC Text	Students will construct a joint frequency contingency table from two categorical variables.
Data Analysis & Probability	Students will be introduced to histograms, frequency polygons, and frequency curves.	10.B.2b; 10.A.2a	ICC Text	Students will construct a histogram, frequency polygon, and frequency curve from a frequency (or relative frequency) distribution.
Data Analysis & Probability	Students will acquire knowledge on how to determine an appropriate measure of central tendency for scaled data.	10.B.2c	ICC Text	Students will determine an appropriate measure of central tendency for data scaled on nominal, on ordinal, and on interval and ratio levels.

Data Analysis & Probability	Students will comprehend why the mean is influenced by extreme values in a distribution while the median is relatively unaffected by extreme values.	10.B.2c	ICC Text	Students will explain why the mean is influenced by extreme values in a distribution while the median is relatively unaffected by extreme values.
Data Analysis & Probability	Students will understand the differences among the definitions of the range of a set of data.	10.B.2c	ICC Text	Students will distinguish among three definitions of the range of a set of data.
Data Analysis & Probability	Students will understand how to transform a relative frequency distribution into a relative cumulative frequency distribution.	10.B.2d	ICC Text	Students will transform a relative frequency distribution into a relative cumulative frequency distribution.
Data Analysis & Probability	Students will comprehend the differences between "real" and "apparent" class interval limits.	10.B.2d	ICC Text	Students will distinguish between "real" and "apparent" class interval limits.
Data Analysis & Probability	Students will explore the elementary rules of the probability of the occurrence of an event.	10.C.1a; 10.C.1b	ICC Text	Students will use elementary rules to determine the probability of the occurrence of an event.
Data Analysis & Probability	Students will understand how to use ratios of geometric measures to determine the probability of success.	10.C.2a	ICC Text	Students will use ratios of geometric measures to determine the probability of success on an experimental trial.
Data Analysis & Probability	Students will acquire knowledge about populations and samples.	10.C.2a	ICC Text	Students will distinguish between a population and a sample.
Data Analysis & Probability	Students will be introduced to "representativeness" of a sample.	10.C.2a	ICC Text	Students will explain the importance of "representativeness" in forming a sample.
Data Analysis & Probability	Students will understand how to find the sample size $n$ for a given population of size $N$ .	10.C.2a	ICC Text	Students will determine an appropriate sample size $n$ for a given population of size $N$ .
Data Analysis & Probability	Students will understand the differences between a statistic and a parameter.	10.C.2a	ICC Text	Students will contrast a statistic and a parameter.
Data Analysis & Probability	Students will understand the differences between point estimation and interval estimation.	10.C.2a	ICC Text	Students will distinguish between point estimation and interval estimation.
Data Analysis & Probability	Students will understand how to translate probability of occurrence to odds.	10.C.2a; 10.C.3b	ICC Text	Students will translate probability of occurrence to odds.

Data Analysis & Probability	Students will introduced to a tree diagram and how it represents probability outcomes.	10.C.2a; 10.C.3b	ICC Text	Students will construct a tree diagram to represent probability outcomes.
Data Analysis & Probability	Students will learn the addition rule and the multiplication rule of probability with Venn diagrams.	10.C.2c	ICC Text	Students will illustrate the addition rule and the multiplication rule of probability with Venn diagrams.
Data Analysis & Probability	Students will acquire knowledge about mutually exclusive events.	10.C.2c; 10.C.5a	ICC Text	Students will recognize mutually exclusive events.
Data Analysis & Probability	Students will acquire knowledge about independent events.	10.C.2c; 10.C.5a	ICC Text	Students will recognize independent events.
Data Analysis & Probability	Students will comprehend the relationship between a statement of probability and a relative frequency distribution.	10.C.4a	ICC Text	Students will relate a statement of probability to a relative frequency distribution.
Data Analysis & Probability	Students will study the computational procedure to compute the conditional probability when provided appropriate data.	10.C.4a; 10.C.5a	ICC Text	Students will compute conditional probability when provided appropriate data.
Data Analysis & Probability	Students will explore discrete and continuous variables.	10.C.4c	ICC Text	Students will distinguish between discrete and continuous variables.
Data Analysis & Probability	Students will be introduced to the numerical limits (range) of probability statements.	10.C.4c	ICC Text	Students will define the numerical limits of probability statements.
Data Analysis & Probability	Students will learn how to identify biased samples.	10.C.4c	ICC Text	Students will identify biased samples.
Data Analysis & Probability	Students will acquire knowledge about the characteristics of random sampling.	10.C.4c	ICC Text	Students will identify an important characteristic of random sampling.
Data Analysis & Probability	Students will understand how to use Bayes' theorem to compute conditional probability.	10.C.5a	ICC Text	Students will use Bayes' theorem to compute conditional probability.
Data Analysis & Probability	Students will explore the differences between combinations and permutations.	10.C.5b	ICC Text	Students will distinguish between combinations and permutations.
Data Analysis & Probability	Students will acquire knowledge as to how to find the number of combinations and permutations of r things taken N at a time.	10.C.5b	ICC Text	Students will calculate the number of combinations and permutations of r things taken N at a time.
Data Analysis & Probability	Students will acquire knowledge about the characteristics of the normal curve.	10.C.5c	ICC Text	Students will describe characteristics of the normal curve.



Data Analysis & Probability	Students will explore the characteristics of the normal curve and its relationship to probabilities of classes of a random variable.	10.C.5c	ICC Text	Students will apply the characteristics of the normal curve to determine probabilities of classes of the random variable.
Data Analysis & Probability	Students will explore how to calculate confidence levels using the normal curve.	10.C.5c	ICC Text	Students will use characteristics of the normal curve to calculate confidence intervals for any reasonable level of confidence.