

Current TEKS	Adopted TEKS – Implementation 2014-2015 school year if the Commissioner of Education has determined that instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills.
<p>(a) Introduction.</p> <p>(1) Within a well-balanced mathematics curriculum, the primary focal points at Grade 8 are using basic principles of algebra to analyze and represent both proportional and non-proportional linear relationships and using probability to describe data and make predictions.</p>	<p>Introduction.</p> <p>(1) The desire to achieve educational excellence is the driving force behind the Texas essential knowledge and skills for mathematics, guided by the college and career readiness standards. By embedding statistics, probability, and finance, while focusing on computational thinking, mathematical fluency and solid understanding, Texas will lead the way in mathematics education and prepare all Texas students for the challenges they will face in the 21st century. The desire to achieve educational excellence is the driving force behind the Texas essential knowledge and skills for mathematics, guided by the college and career readiness standards. By embedding statistics, probability, and finance, while focusing on computational thinking, mathematical fluency and solid understanding, Texas will lead the way in mathematics education and prepare all Texas students for the challenges they will face in the 21st century.</p>
<p>(a) Introduction.</p> <p>(2) Throughout mathematics in Grades 6-8, students build a foundation of basic understandings in number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; measurement; and probability and statistics. Students use concepts, algorithms, and properties of rational numbers to explore mathematical relationships and to describe increasingly complex situations. Students use algebraic thinking to describe how a change in one quantity in a relationship results in a change in the other; and they connect verbal, numeric, graphic, and symbolic representations of relationships. Students use geometric properties and relationships, as well as spatial reasoning, to model and analyze situations and solve problems. Students communicate information about geometric figures or situations by quantifying attributes, generalize procedures from measurement experiences, and use the procedures to solve problems. Students use appropriate statistics, representations of data, reasoning, and concepts of probability to draw conclusions, evaluate arguments, and make recommendations.</p>	<p>(3) The primary focal areas in Grade 8 are proportionality; expressions, equations, relationships, and foundations of functions; and measurement and data. Students use concepts, algorithms, and properties of real numbers to explore mathematical relationships and to describe increasingly complex situations. Students use concepts of proportionality to explore, develop, and communicate mathematical relationships. Students use algebraic thinking to describe how a change in one quantity in a relationship results in a change in the other. Students connect verbal, numeric, graphic, and symbolic representations of relationships, including equations and inequalities. Students begin to develop an understanding of functional relationships. Students use geometric properties and relationships, as well as spatial reasoning, to model and analyze situations and solve problems. Students communicate information about geometric figures or situations by quantifying attributes, generalize procedures from measurement experiences, and use the procedures to solve problems. Students use appropriate statistics, representations of data, and reasoning to draw conclusions, evaluate arguments, and make recommendations. While the use of all types of technology is important, the emphasis on algebra readiness skills necessitates the implementation of graphing technology.</p>

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<p>(a) Introduction.</p> <p>(3) Problem solving in meaningful contexts, language and communication, connections within and outside mathematics, and formal and informal reasoning underlie all content areas in mathematics. Throughout mathematics in Grades 6-8, students use these processes together with graphing technology and other mathematical tools such as manipulative materials to develop conceptual understanding and solve problems as they do mathematics.</p>	<p>(2) The process standards describe ways in which students are expected to engage in the content. The placement of the process standards at the beginning of the knowledge and skills listed for each grade and course is intentional. The process standards weave the other knowledge and skills together so that students may be successful problem solvers and use mathematics efficiently and effectively in daily life. The process standards are integrated at every grade level and course. When possible, students will apply mathematics to problems arising in everyday life, society, and the workplace. Students will use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Students will select appropriate tools such as real objects, manipulatives, algorithms, paper and pencil, and technology and techniques such as mental math, estimation, number sense, and generalization and abstraction to solve problems. Students will effectively communicate mathematical ideas, reasoning, and their implications using multiple representations such as symbols, diagrams, graphs, computer programs, and language. Students will use mathematical relationships to generate solutions and make connections and predictions. Students will analyze mathematical relationships to connect and communicate mathematical ideas. Students will display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication.</p>
	<p>(4) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</p>

<p><b>Current TEKS: Number, operation, and quantitative reasoning</b></p>	<p><b>Adopted TEKS – Implementation 2014-2015 school year if the Commissioner of Education has determined that instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills.</b></p>
<p><b>8.1A Number, operation, and quantitative reasoning.</b> The student understands that different forms of numbers are appropriate for different situations. <b>The student is expected to compare and order rational numbers in various forms including integers, percents, and positive and negative fractions and decimals.</b></p>	<p><b>8.2D Number and Operations.</b> The student applies mathematical process standards to represent and use real numbers in a variety of forms. <b>The student is expected to order a set of real numbers arising from mathematical and real-world contexts.</b></p>
<p><b>8.1B Number, operation, and quantitative reasoning.</b> The student understands that different forms of numbers are appropriate for different situations. <b>The student is expected to select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships.</b></p>	
<p><b>8.1C Number, operation, and quantitative reasoning.</b> The student understands that different forms of numbers are appropriate for different situations. <b>The student is expected to approximate (mentally and with calculators) the value of irrational numbers as they arise from problem situations ( such as <math>\pi</math>, <math>\sqrt{2}</math>).</b> <i>[Also from current 7.1C]</i></p>	<p><b>8.2B Number and Operations.</b> The student applies mathematical process standards to represent and use real numbers in a variety of forms. <b>The student is expected to approximate the value of an irrational number, including <math>\pi</math> and square roots of numbers less than 225, and locate that rational number approximation on a number line.</b></p>
<p><b>8.1D Number, operation, and quantitative reasoning.</b> The student understands that different forms of numbers are appropriate for different situations. <b>The student is expected to express numbers in scientific notation, including negative exponents, in appropriate problem situations.</b></p>	<p><b>8.2C Number and Operations.</b> The student applies mathematical process standards to represent and use real numbers in a variety of forms. <b>The student is expected to convert between standard decimal notation and scientific notation.</b></p>
<p><b>8.1E Number, operation, and quantitative reasoning.</b> The student understands that different forms of numbers are appropriate for different situations. <b>The student is expected to compare and order real numbers with a calculator.</b></p>	<p><b>8.2D Number and Operations.</b> The student applies mathematical process standards to represent and use real numbers in a variety of forms. <b>The student is expected to order a set of real numbers arising from mathematical and real-world contexts.</b></p>
<p><b>8.2A Number, operation, and quantitative reasoning.</b> The student selects and uses appropriate operations to solve problems and justify solutions. <b>The student is expected to select appropriate operations to solve problems involving rational numbers and justify the selections.</b></p>	
<p><b>8.2B Number, operation, and quantitative reasoning.</b> The student selects and uses appropriate operations to solve problems and justify solutions. <b>The student is expected to use appropriate operations to solve problems involving rational numbers in problem situations.</b></p>	
<p><b>8.2C Number, operation, and quantitative reasoning.</b> The student selects and uses appropriate operations to solve problems and justify solutions. <b>The student is expected to evaluate a solution for reasonableness.</b></p>	<p><i>[Embedded into 8.1B]</i></p>

<p><b>Current TEKS: Number, operation, and quantitative reasoning</b></p>	<p><b>Adopted TEKS – Implementation 2014-2015 school year if the Commissioner of Education has determined that instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills.</b></p>
<p>8.2D <b>Number, operation, and quantitative reasoning.</b> The student selects and uses appropriate operations to solve problems and justify solutions.  <b>The student is expected to use multiplication by a given constant factor (including unit rate) to represent and solve problems involving proportional relationships including conversions between measurement systems.</b></p>	<p>8.5A <b>Proportionality.</b> The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions.  <b>The student is expected to represent linear proportional situations with tables, graphs, and equations in the form of <math>y = kx</math>.</b>  <i>[Also moved to 7.4C]</i></p>
	<p>8.2A <b>Number and Operations.</b> The student applies mathematical process standards to represent and use real numbers in a variety of forms.  <b>The student is expected to extend previous knowledge of sets and subsets using a visual representation to describe relationships between sets of real numbers.</b></p>

<p><b>Current TEKS: Patterns, relationships, and algebraic thinking</b></p>	<p><b>Adopted TEKS – Implementation 2014-2015 school year if the Commissioner of Education has determined that instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills.</b></p>
<p>8.3A <b>Patterns, relationships, and algebraic thinking.</b> The student identifies proportional or non-proportional linear relationships in problem situations and solves problems.  <b>The student is expected to compare and contrast proportional and non-proportional linear relationships.</b></p>	<p>8.5F <b>Proportionality.</b> The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions.  <b>The student is expected to distinguish between proportional and non-proportional situations using tables, graphs, and equations in the form <math>y = kx</math> or <math>y = mx + b</math>, where <math>b \neq 0</math>.</b></p> <p>8.5H <b>Proportionality.</b> The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions.  <b>The student is expected to identify examples of proportional and non-proportional functions that arise from mathematical and real-world problems.</b></p>
<p>8.3B <b>Patterns, relationships, and algebraic thinking.</b> The student identifies proportional or non-proportional linear relationships in problem situations and solves problems.  <b>The student is expected to estimate and find solutions to application problems involving percents and other proportional relationships such as similarity and rates.</b></p> <p style="text-align: right;"><i>[Also from current A.6G]</i></p>	<p>8.5E <b>Proportionality.</b> The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions.  <b>The student is expected to solve problems involving direct variation.</b></p>
<p>8.4A <b>Patterns, relationships, and algebraic thinking.</b> The student makes connections among various representations of a numerical relationship.  <b>The student is expected to generate a different representation of data given another representation of data (such as a table, graph, equation, or verbal description).</b></p> <p style="text-align: right;"><i>[Also from current A.5C]</i></p>	<p>8.5A <b>Proportionality.</b> The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions.  <b>The student is expected to represent linear proportional situations with tables, graphs, and equations in the form of <math>y = kx</math>.</b></p> <p>8.5B <b>Proportionality.</b> The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions.  <b>The student is expected to represent linear non-proportional situations with tables, graphs, and equations in the form of <math>y = mx + b</math>, <math>b \neq 0</math>.</b></p> <p>8.5I <b>Proportionality.</b> The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions.  <b>The student is expected to write an equation in the form <math>y = mx + b</math> to model a linear relationship between two quantities using verbal, numerical, tabular, and graphical representations.</b></p>

<p><b>Current TEKS: Patterns, relationships, and algebraic thinking</b></p>	<p><b>Adopted TEKS – Implementation 2014-2015 school year if the Commissioner of Education has determined that instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills.</b></p>
<p><b>8.5A Patterns, relationships, and algebraic thinking.</b> The student uses graphs, tables, and algebraic representations to make predictions and solve problems. <b>The student is expected to predict, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations.</b></p>	<p><i>[Embedded into 8.5A, 8.5B, 8.5I]</i></p>
<p><b>8.5B Patterns, relationships, and algebraic thinking.</b> The student uses graphs, tables, and algebraic representations to make predictions and solve problems. <b>The student is expected to find and evaluate an algebraic expression to determine any term in an arithmetic sequence (with a constant rate of change).</b></p>	<p><i>[Embedded into 6.4A, 6.6B, 6.6C]</i></p>
<p><i>[Moved from current A.6A]</i></p>	<p><b>8.4A Proportionality.</b> The student applies mathematical process standards to explain proportional and non-proportional relationships involving slope. <b>The student is expected to use similar right triangles to develop an understanding that slope, <math>m</math>, given as the rate comparing the change in <math>y</math>-values to the change in <math>x</math>-values, <math>(y_2 - y_1) / (x_2 - x_1)</math>, is the same for any two points <math>(x_1, y_1)</math> and <math>(x_2, y_2)</math> on the same line.</b></p> <p><b>8.4B Proportionality.</b> The student applies mathematical process standards to explain proportional and non-proportional relationships involving slope. <b>The student is expected to graph proportional relationships, interpreting the unit rate as the slope of the line that models the relationship.</b></p>
<p><i>[Moved from current A.7A]</i></p>	<p><b>8.4C Proportionality.</b> The student applies mathematical process standards to explain proportional and non-proportional relationships involving slope. <b>The student is expected to use data from a table or graph to determine the rate of change or slope and <math>y</math>-intercept in mathematical and real-world problems.</b></p>
	<p><b>8.5C Proportionality.</b> The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions. <b>The student is expected to contrast bivariate sets of data that suggest a linear relationship with bivariate sets of data that do not suggest a linear relationship from a graphical representation.</b></p>
<p><i>[Moved from current A.1B, A.1D, A.5A]</i></p>	<p><b>8.5G Proportionality.</b> The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions. <b>The student is expected to identify functions using sets of ordered pairs, tables, mappings, and graphs.</b></p>

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	<p><b>8.8A Expressions, Equations, and Relationships.</b> The student applies mathematical process standards to use one-variable equations or inequalities in problem situations. <b>The student is expected to write one-variable equations or inequalities with variables on both sides that represent problems using rational number coefficients and constants.</b></p>
	<p><b>8.8B Expressions, Equations, and Relationships.</b> The student applies mathematical process standards to use one-variable equations or inequalities in problem situations. <b>The student is expected to write a corresponding real-world problem when given a one-variable equation or inequality with variables on both sides of the equal sign using rational number coefficients and constants.</b></p>
	<p><b>8.8C Expressions, Equations, and Relationships.</b> The student applies mathematical process standards to use one-variable equations or inequalities in problem situations. <b>The student is expected to model and solve one-variable equations with variables on both sides of the equal sign that represent mathematical and real-world problems using rational number coefficients and constants.</b></p>
<p><i>[Moved from current A.8B and A.8C]</i></p>	<p><b>8.9 Expressions, Equations, and Relationships.</b> The student applies mathematical process standards to use multiple representations to develop foundational concepts of simultaneous linear equations. <b>The student is expected to identify and verify the values of <math>x</math> and <math>y</math> that simultaneously satisfy two linear equations in the form <math>y = mx + b</math> from the intersections of the graphed equations.</b></p>



<p><b>Current TEKS: Geometry and spatial reasoning</b></p>	<p><b>Adopted TEKS – Implementation 2014-2015 school year if the Commissioner of Education has determined that instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills.</b></p>
<p>8.6A <b>Geometry and spatial reasoning.</b> The student uses transformational geometry to develop spatial sense. <b>The student is expected to generate similar figures using dilations including enlargements and reductions.</b></p>	<p>8.3B <b>Proportionality.</b> The student applies mathematical process standards to use proportional relationships to describe dilations. <b>The student is expected to compare and contrast the attributes of a shape and its dilation(s) on a coordinate plane.</b></p>
<p>8.6B <b>Geometry and spatial reasoning.</b> The student uses transformational geometry to develop spatial sense. <b>The student is expected to graph dilations, reflections, and translations on a coordinate plane.</b></p>	<p>8.3C <b>Proportionality.</b> The student applies mathematical process standards to use proportional relationships to describe dilations. <b>The student is expected to use an algebraic representation to explain the effect of a given positive rational scale factor applied to two-dimensional figures on a coordinate plane with the origin as the center of dilation.</b></p> <p>8.10A <b>Two-Dimensional Shapes.</b> The student applies mathematical process standards to develop transformational geometry concepts. <b>The student is expected to generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane.</b></p> <p>8.10C <b>Two-Dimensional Shapes.</b> The student applies mathematical process standards to develop transformational geometry concepts. <b>The student is expected to explain the effect of translations, reflections over the x- or y-axis, and rotations limited to 90°, 180°, 270°, and 360° as applied to two-dimensional shapes on a coordinate plane using an algebraic representation.</b></p>
<p>8.7A <b>Geometry and spatial reasoning.</b> The student uses geometry to model and describe the physical world. <b>The student is expected to draw three-dimensional figures from different perspectives.</b></p>	
<p>8.7B <b>Geometry and spatial reasoning.</b> The student uses geometry to model and describe the physical world. <b>The student is expected to use geometric concepts and properties to solve problems in fields such as art and architecture.</b></p>	
<p>8.7C <b>Geometry and spatial reasoning.</b> The student uses geometry to model and describe the physical world. <b>The student is expected to use pictures or models to demonstrate the Pythagorean Theorem.</b></p>	<p>8.6C <b>Expressions, Equations, and Relationships.</b> The student applies mathematical process standards to develop mathematical relationships and make connections to geometric formulas. <b>The student is expected to use models and diagrams to explain the Pythagorean theorem.</b></p>



<p>8.7D <b>Geometry and spatial reasoning.</b> The student uses geometry to model and describe the physical world.  <b>The student is expected to locate and name points on a coordinate plane using ordered pairs of rational numbers.</b></p>	<p><i>[Moved to 6.11]</i></p>
<p><i>[Moved from current G.2B and G.9A]</i></p>	<p>8.8D <b>Expressions, Equations, and Relationships.</b> The student applies mathematical process standards to use one-variable equations or inequalities in problem situations.  <b>The student is expected to use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.</b></p>
	<p>8.10B <b>Two-Dimensional Shapes.</b> The student applies mathematical process standards to develop transformational geometry concepts.  <b>The student is expected to differentiate between transformations that preserve congruence and those that do not.</b></p>
<p><i>[Rotations moved from current G.10A]</i></p>	<p>8.10A <b>Two-Dimensional Shapes.</b> The student applies mathematical process standards to develop transformational geometry concepts.  <b>The student is expected to generalize the properties of orientation and congruence of <u>rotations</u>, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane.</b></p> <p>8.10C <b>Two-Dimensional Shapes.</b> The student applies mathematical process standards to develop transformational geometry concepts.  <b>The student is expected to explain the effect of translations, reflections over the x- or y-axis, and <u>rotations limited to 90°, 180°, 270°, and 360°</u> as applied to two-dimensional shapes on a coordinate plane using an algebraic representation.</b></p>

<p><b>Current TEKS: Measurement</b></p>	<p><b>Adopted TEKS – Implementation 2014-2015 school year if the Commissioner of Education has determined that instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills.</b></p>
<p>8.8A <b>Measurement.</b> The student uses procedures to determine measures of three-dimensional figures.  <b>The student is expected to find lateral and total surface area of prisms, pyramids, and cylinders using concrete models and nets (two-dimensional models).</b></p>	<p>8.7B <b>Expressions, Equations, and Relationships.</b> The student applies mathematical process standards to use geometry to solve problems.  <b>The student is expected to use previous knowledge of surface area to make connections to the formulas for lateral and total surface area and determine solutions for problems involving rectangular prisms, triangular prisms, and cylinders.</b>  <i>[Also moved to 7.9D]</i></p>
<p>8.8B <b>Measurement.</b> The student uses procedures to determine measures of three-dimensional figures.  <b>The student is expected to connect models of prisms, cylinders, pyramids, spheres, and cones to formulas for volume of these objects.</b></p>	<p>8.6A <b>Expressions, Equations, and Relationships.</b> The student applies mathematical process standards to develop mathematical relationships and make connections to geometric formulas.  <b>The student is expected to describe the volume formula <math>V = Bh</math> of a cylinder in terms of its base area and its height.</b>  <i>[Also moved to 7.8A &amp; 7.8B]</i></p> <p>8.6B <b>Expressions, Equations, and Relationships.</b> The student applies mathematical process standards to develop mathematical relationships and make connections to geometric formulas.  <b>The student is expected to model the relationship between the volume of a cylinder and a cone having both congruent bases and heights and connect that relationship to the formulas.</b></p>
<p>8.8C <b>Measurement.</b> The student uses procedures to determine measures of three-dimensional figures.  <b>The student is expected to estimate measurements and use formulas to solve application problems involving lateral and total surface area and volume.</b></p>	<p>8.7A <b>Expressions, Equations, and Relationships.</b> The student applies mathematical process standards to use geometry to solve problems.  <b>The student is expected to solve problems involving the volume of cylinders, cones, and spheres.</b></p> <p>8.7B <b>Expressions, Equations, and Relationships.</b> The student applies mathematical process standards to use geometry to solve problems.  <b>The student is expected to use previous knowledge of surface area to make connections to the formulas for lateral and total surface area and determine solutions for problems involving rectangular prisms, triangular prisms, and cylinders.</b></p>
<p>8.9A <b>Measurement.</b> The student uses indirect measurement to solve problems.  <b>The student is expected to use the Pythagorean Theorem to solve real-life problems.</b></p>	<p>8.7C <b>Expressions, Equations, and Relationships.</b> The student applies mathematical process standards to use geometry to solve problems.  <b>The student is expected to use the Pythagorean Theorem and its converse to solve problems.</b></p>

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<p><b>8.9B Measurement.</b> The student uses indirect measurement to solve problems. <b>The student is expected to use proportional relationships in similar two-dimensional figures or similar three-dimensional figures to find missing measurements.</b></p>	<p><i>[Moved to 7.5C]</i></p>
<p><b>8.10A Measurement.</b> The student describes how changes in dimensions affect linear, area, and volume measures. <b>The student is expected to describe the resulting effects on perimeter and area when dimensions of a shape are changed proportionally.</b></p>	<p><b>8.10D Two-Dimensional Shapes.</b> The student applies mathematical process standards to develop transformational geometry concepts. <b>The student is expected to model the effect on linear and area measurements of dilated two-dimensional shapes.</b></p>
<p><b>8.10B Measurement.</b> The student describes how changes in dimensions affect linear, area, and volume measures. <b>The student is expected to describe the resulting effect on volume when dimensions of a solid are changed proportionally.</b></p>	
<p><i>[Moved from current 7.6D]</i></p>	<p><b>8.3A Proportionality.</b> The student applies mathematical process standards to use proportional relationships to describe dilations. <b>The student is expected to generalize that the ratio of corresponding sides of similar shapes are proportional, including a shape and its dilation.</b></p>
	<p><b>8.7D Expressions, Equations, and Relationships.</b> The student applies mathematical process standards to use geometry to solve problems. <b>The student is expected to determine the distance between two points on a coordinate plane using the Pythagorean Theorem.</b></p>

<p><b>Current TEKS: Probability and statistics</b></p>	<p><b>Adopted TEKS – Implementation 2014-2015 school year if the Commissioner of Education has determined that instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills.</b></p>
<p>8.11A <b>Probability and statistics.</b> The student applies concepts of theoretical and experimental probability to make predictions. <b>The student is expected to find the probabilities of dependent and independent events.</b></p>	<p><i>[Moved to 7.6I]</i></p>
<p>8.11B <b>Probability and statistics.</b> The student applies concepts of theoretical and experimental probability to make predictions. <b>The student is expected to use theoretical probabilities and experimental results to make predictions and decisions.</b></p>	<p><i>[Moved to 7.6C and 7.6D]</i></p>
<p>8.11C <b>Probability and statistics.</b> The student applies concepts of theoretical and experimental probability to make predictions. <b>The student is expected to select and use different models to simulate an event.</b></p>	<p><i>[Moved to 7.6B]</i></p>
<p>8.12A <b>Probability and statistics.</b> The student uses statistical procedures to describe data. <b>The student is expected to use variability (range, including interquartile range (IQR)) and select the appropriate measure of central tendency to describe a set of data and justify the choice for a particular situation.</b></p>	<p><i>[Moved to 6.12C and 6.12D]</i></p>
<p>8.12B <b>Probability and statistics.</b> The student uses statistical procedures to describe data. <b>The student is expected to draw conclusions and make predictions by analyzing trends in scatterplots.</b></p>	<p>8.5D <b>Proportionality.</b> The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions. <b>The student is expected to use a trend line that approximates the linear relationship between bivariate sets of data to make predictions.</b></p> <p>8.11A <b>Measurement and Data.</b> The student applies mathematical process standards to use statistical procedures to describe data. <b>The student is expected to construct a scatterplot and describe the observed data to address questions of association such as linear, non-linear, and no association between bivariate data.</b></p>
<p>8.12C <b>Probability and statistics.</b> The student uses statistical procedures to describe data. <b>The student is expected to select and use an appropriate representation for presenting and displaying relationships among collected data, including line plots, line graphs, stem and leaf plots, circle graphs, bar graphs, box and whisker plots, histograms, and Venn diagrams, with and without the use of technology.</b></p>	<p><i>[Moved to prior grade levels]</i></p>

<p><b>Current TEKS: Probability and statistics</b></p>	<p><b>Adopted TEKS – Implementation 2014-2015 school year if the Commissioner of Education has determined that instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills.</b></p>
<p>8.13A <b>Probability and statistics.</b> The student evaluates predictions and conclusions based on statistical data.  <b>The student is expected to evaluate methods of sampling to determine validity of an inference made from a set of data.</b></p>	
<p>8.13B <b>Probability and statistics.</b> The student evaluates predictions and conclusions based on statistical data.  <b>The student is expected to recognize misuses of graphical or numerical information and evaluate predictions and conclusions based on data analysis.</b></p>	
	<p>8.11B <b>Measurement and Data.</b> The student applies mathematical process standards to use statistical procedures to describe data.  <b>The student is expected to determine the mean absolute deviation and use this quantity as a measure of the average distance data are from the mean using a data set of no more than 10 data points.</b></p>
	<p>8.11C <b>Measurement and Data.</b> The student applies mathematical process standards to use statistical procedures to describe data.  <b>The student is expected to simulate generating random samples of the same size from a population with known characteristics to develop the notion of a random sample being representative of the population from which it was selected.</b></p>

<p><b>Current TEKS: Underlying processes and mathematical tools</b></p>	<p><b>Adopted TEKS – Implementation 2014-2015 school year if the Commissioner of Education has determined that instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills.</b></p>
<p>8.14A <b>Underlying processes and mathematical tools.</b> The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school. <b>The student is expected to identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.</b></p>	<p>8.1A <b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. <b>The student is expected to apply mathematics to problems arising in everyday life, society, and the workplace.</b></p>
<p>8.14B <b>Underlying processes and mathematical tools.</b> The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school. <b>The student is expected to use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.</b></p>	<p>8.1B <b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. <b>The student is expected to use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.</b></p>
<p>8.14C <b>Underlying processes and mathematical tools.</b> The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school. <b>The student is expected to select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.</b></p>	
<p>8.14D <b>Underlying processes and mathematical tools.</b> The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school. <b>The student is expected to select tools such as real objects, manipulatives, paper/pencil, and technology or techniques such as mental math, estimation, and number sense to solve problems.</b></p>	<p>8.1C <b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. <b>The student is expected to select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.</b></p>
<p>8.15A <b>Underlying processes and mathematical tools.</b> The student communicates about Grade 8 mathematics through informal and mathematical language, representations, and models. <b>The student is expected to communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models.</b></p>	<p>8.1D <b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. <b>The student is expected to communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.</b></p>

<p><b>Current TEKS: Underlying processes and mathematical tools</b></p>	<p><b>Adopted TEKS – Implementation 2014-2015 school year if the Commissioner of Education has determined that instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills.</b></p>
<p>8.15B <b>Underlying processes and mathematical tools.</b> The student communicates about Grade 8 mathematics through informal and mathematical language, representations, and models.  <b>The student is expected to evaluate the effectiveness of different representations to communicate ideas.</b></p>	<p>8.1E <b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding.  <b>The student is expected to create and use representations to organize, record, and communicate mathematical ideas.</b></p>
<p>8.16A <b>Underlying processes and mathematical tools.</b> The student uses logical reasoning to make conjectures and verify conclusions.  <b>The student is expected to make conjectures from patterns or sets of examples and nonexamples.</b></p>	<p>8.1F <b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding.  <b>The student is expected to analyze mathematical relationships to connect and communicate mathematical ideas.</b></p>
<p>8.16B <b>Underlying processes and mathematical tools.</b> The student uses logical reasoning to make conjectures and verify conclusions.  <b>The student is expected to validate his/her conclusions using mathematical properties and relationships.</b></p>	<p>8.1G <b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding.  <b>The student is expected to display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.</b></p>



<p><b>Current TEKS: Personal Financial Literacy</b></p>	<p><b>Adopted TEKS – Implementation 2014-2015 school year if the Commissioner of Education has determined that instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills.</b></p>
	<p><b>8.12A Personal financial literacy.</b> The student applies mathematical process standards to develop an economic way of thinking and problem solving useful in one's life as a knowledgeable consumer and investor.  <b>The student is expected to solve real-world problems comparing how interest rate and loan length affect the cost of credit.</b></p>
	<p><b>8.12B Personal financial literacy.</b> The student applies mathematical process standards to develop an economic way of thinking and problem solving useful in one's life as a knowledgeable consumer and investor.  <b>The student is expected to calculate the total cost of repaying a loan, including credit cards and easy access loans, under various rates of interest and over different periods using an online calculator.</b></p>
	<p><b>8.12C Personal financial literacy.</b> The student applies mathematical process standards to develop an economic way of thinking and problem solving useful in one's life as a knowledgeable consumer and investor.  <b>The student is expected to explain how small amounts of money invested regularly, including money saved for college and retirement, grow over time.</b></p>
	<p><b>8.12D Personal financial literacy.</b> The student applies mathematical process standards to develop an economic way of thinking and problem solving useful in one's life as a knowledgeable consumer and investor.  <b>The student is expected to calculate and compare simple interest and compound interest earnings.</b></p>
	<p><b>8.12E Personal financial literacy.</b> The student applies mathematical process standards to develop an economic way of thinking and problem solving useful in one's life as a knowledgeable consumer and investor.  <b>The student is expected to identify and explain the advantages and disadvantages of different payment methods.</b></p>
	<p><b>8.12F Personal financial literacy.</b> The student applies mathematical process standards to develop an economic way of thinking and problem solving useful in one's life as a knowledgeable consumer and investor.  <b>The student is expected to analyze situations to determine if they represent a financially responsible decision and identify the benefits of financial responsibility and the costs of financial irresponsibility.</b></p>

<p><b>Current TEKS: Personal Financial Literacy</b></p>	<p><b>Adopted TEKS – Implementation 2014-2015 school year if the Commissioner of Education has determined that instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills.</b></p>
	<p><b>8.12G Personal financial literacy.</b> The student applies mathematical process standards to develop an economic way of thinking and problem solving useful in one's life as a knowledgeable consumer and investor.  <b>The student is expected to estimate the cost of a 2-year and 4-year college education including family contribution and devise a periodic savings plan for accumulating the money needed to contribute to thte total cost of attendance for at least the 1st year of college.</b></p>