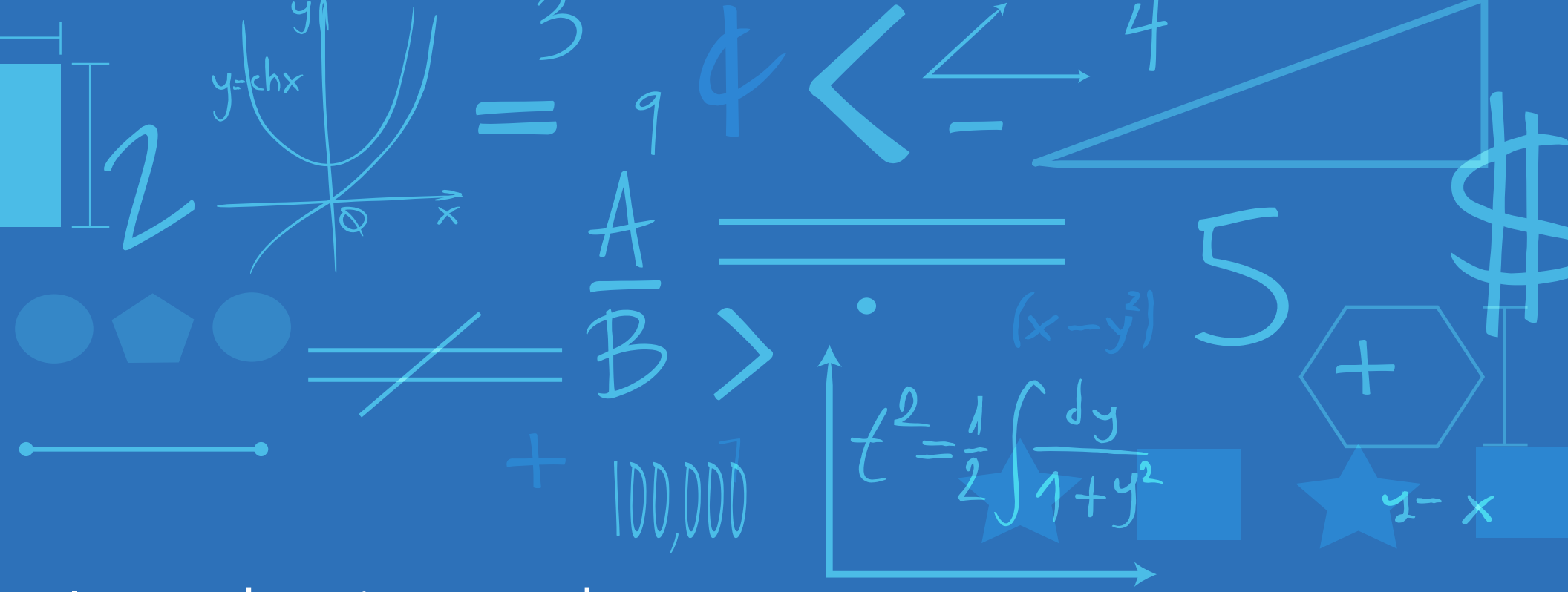

Introduction to the **Revised Mathematics TEKS**

SIDE-BY-SIDE TEKS COMPARISON
GRADE 7

TEA™
TEXAS EDUCATION AGENCY

Old TEKS	Current TEKS (2012)	Supporting Information	Notes
(a) Introduction. (1) Within a well-balanced mathematics curriculum, the primary focal points at Grade 7 are using direct proportional relationships in number, geometry, measurement, and probability; applying addition, subtraction, multiplication, and division of decimals, fractions, and integers; and using statistical measures to describe data	(a) Introduction. (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 definition of a well-balanced mathematics curriculum has expanded to include the CCRS. A focus on mathematical fluency and solid understanding allows for rich exploration of the primary focal points.	
(a) Introduction. (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.	(a) Introduction. (3) The primary focal areas in Grade 7 are number and operations; proportionality; expressions, equations, and relationships; and measurement and data. Students use concepts, algorithms, and properties of rational numbers to explore mathematical relationships and to describe increasingly complex situations. Students use concepts of proportionality to explore, develop, and communicate mathematical relationships, including number, geometry and measurement, and statistics and probability. 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 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.	The 2012 paragraph that highlights more specifics about grade 7 mathematics content follows the paragraph about the mathematical process standards. This supports the notion that the TEKS should be learned in a way that integrates the mathematical process standards in an effort to develop fluency. The 2012 paragraph has been updated to align to the 2012 grade 7 mathematics TEKS.	

Old TEKS	Current TEKS (2012)	Supporting Information	Notes
(a) Introduction. (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.	(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.	This 2012 paragraph occurs second in the Revised TEKS (2012) instead of third as in the current TEKS. This highlights the continued emphasis on process skills that now continue from Kindergarten through high school mathematics. The language of this 2012 introductory paragraph is very similar to the Mathematical process standards strand within the Revised TEKS (2012). This 2012 introductory paragraph includes generalization and abstraction with the text from 7(1)(C). This 2012 introductory paragraph states, “students will use mathematical relationships to generate solutions and make connections and predictions” instead of the text from 7(1)(E).	
	(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.		

	Old TEKS – Number, Operation, and Quantitative Reasoning Strand	Current TEKS (2012)	Supporting Information	Notes
–	7(1)(A) **Number, operation, and quantitative reasoning.** The student represents and uses numbers in a variety of equivalent forms. **The student is expected to compare and order integers and positive rational numbers.**		The content of this SE was moved to grade 6: *Number and operations* 6(2)(C) 6(2)(D)	
–	7(1)(B) **Number, operation, and quantitative reasoning.** The student represents and uses numbers in a variety of equivalent forms. **The student is expected to convert between fractions, decimals, whole numbers, and percents mentally, on paper, or with a calculator.**		The content of this SE was moved to grade 6: *Number and operations* 6(4)(G)	
–	7(1)(C) **Number, operation, and quantitative reasoning.** The student represents and uses numbers in a variety of equivalent forms. **The student is expected to represent squares and square roots using geometric models.**		The content of this SE was moved to grade 8: *Number and operations* 8(2)(B)	
–	7(2)(A) **Number, operation, and quantitative reasoning.** The student adds, subtracts, multiplies, or divides to solve problems and justify solutions. **The student is expected to represent multiplication and division situations involving fractions and decimals with models, including concrete objects, pictures, words, and numbers.**		The content of this SE was moved to grade 5 and grade 6: *Number and operations* 5(3)(I) 5(3)(J) 5(3)(L) *Number and operations* 6(3)(A)	

	Old TEKS – Number, Operation, and Quantitative Reasoning Strand	Current TEKS (2012)	Supporting Information	Notes
●+	7(2)(B) **Number, operation, and quantitative reasoning.** The student adds, subtracts, multiplies, or divides to solve problems and justify solutions. **The student is expected to use addition, subtraction, multiplication, and division to solve problems involving fractions and decimals.**	7(3)(A) **Number and operations.** The student applies mathematical process standards to add, subtract, multiply, and divide while solving problems and justifying solutions. **The student is expected to add, subtract, multiply, and divide**	The current SE was separated into two SEs within the Revised TEKS (2012). The addition, subtraction, multiplication, and division of rational numbers include fractions and decimals. In the Revised TEKS (2012) students are expected to be fluent with multiplying and dividing positive rational numbers and integers in grade with 6 6(3)(E) and 6(3)(D). When paired with revised SE 7(1)(A) and 7(3)(B), the expectation is that students solve problems.	
		rational numbers fluently.	The revised SE extends to include the addition, subtraction, multiplication, and division of both positive and negative rational numbers including percents and integers. The word "fluently" as been added. "Procedural fluency refers to knowledge of procedures, knowledge of when and how to use them appropriately, and skill in performing them flexibly, accurately, and efficiently" (National Research Council, 2001, p. 121)	
		7(3)(B) **Number and operations.** The student applies mathematical process standards to add, subtract, multiply, and divide while solving problems and justifying solutions. **The student is expected to apply and extend previous understandings of operations to solve problems using addition, subtraction, multiplication, and division**	The current SE was separated into two SEs within the Revised TEKS (2012). The phrase "apply and extend previous understandings of operations" refers to applying the algorithms for operations with integers and operations with fractions and decimals to perform operations with rational numbers.	
		of rational numbers.	The revised SE extends to include the addition, subtraction, multiplication, and division of both positive and negative rational numbers including percents and integers.	
−	7(2)(C) **Number, operation, and quantitative reasoning.** The student adds, subtracts, multiplies, or divides to solve problems and justify solutions. **The student is expected to use models, such as concrete objects, pictorial models, and number lines, to add, subtract, multiply, and divide integers and connect the actions to algorithms.**		The content of this SE was moved to grade 6: *Number and operations* 6(3)(C)	

Content that is deleted by 2012 TEKS | Content that remains or is clarified in 2012 TEKS (●Stay) (●+ Addition) (⭘ Deletion) | Content that is new in 2012 TEKS

	Old TEKS – Number, Operation, and Quantitative Reasoning Strand	Current TEKS (2012)	Supporting Information	Notes
●	7(2)(D) **Number, operation, and quantitative reasoning.** The student adds, subtracts, multiplies, or divides to solve problems and justify solutions. **The student is expected to use division to find unit rates and ratios in proportional relationships such as speed, density, price, recipes, and student-teacher ratio.**	7(4)(B) **Proportionality**. The student applies mathematical process standards to represent and solve problems involving proportional relationships. **The student is expected to calculate unit rates from rates in mathematical and real-world problems.**	Examples of unit rates in mathematical and real-world problems include those involving speed, density, price, measurements in recipes, and student-teacher ratios considering this ratio as a rate of students to teachers. The phrase "calculate unit rates from rates" is more concise than "use division to find unit rates and ratios."	
–	7(2)(E) **Number, operation, and quantitative reasoning.** The student adds, subtracts, multiplies, or divides to solve problems and justify solutions. **The student is expected to simplify numerical expressions involving order of operations and exponents.**		The content of this SE was moved to grade 6: *Expressions, equations, and relationships* 6(7)(A)	
●	7(2)(F) **Number, operation, and quantitative reasoning.** The student adds, subtracts, multiplies, or divides to solve problems and justify solutions. **The student is expected to select and use appropriate operations to solve problems and justify the selections.**	7(1)(B) **Mathematical process standards.** The student uses mathematical processes to acquire and demonstrate mathematical understanding. **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.**	The content of the current SE has been subsumed within revised SE 7(1)(B).	
●	7(2)(G) **Number, operation, and quantitative reasoning.** The student adds, subtracts, multiplies, or divides to solve problems and justify solutions. **The student is expected to determine the reasonableness of a solution to a problem.**	7(1)(B) **Mathematical process standards.** The student uses mathematical processes to acquire and demonstrate mathematical understanding. **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.**	The content of the current SE has been subsumed within revised SE 7(1)(B).	
+		7(2) **Number and operations.** The student applies mathematical process standards to represent and use rational numbers in a variety of forms. **The student is expected to extend previous knowledge of sets and subsets using a visual representation to describe relationships between sets of rational numbers.**	Subsets of rational numbers include counting numbers, whole numbers, and integers. A Venn diagram is an applicable visual representation.	

	Old TEKS – Patterns, Relationships, and Algebraic Thinking Strand	Current TEKS (2012)	Supporting Information	Notes
●	7(3)(A) **Patterns, relationships, and algebraic thinking.** The student solves problems involving direct proportional relationships. **The student is expected to estimate and find solutions to application problems involving percent.**	7(4)(D) **Proportionality**. The student applies mathematical process standards to represent and solve problems involving proportional relationships. **The student is expected to solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and percent decrease, and financial literacy problems.**	Specificity has been added regarding the types of percent problems with "multi-step problems involving percent increase and percent decrease." These applications may include tax, tip, discount, markup, simple interest, and commission.	
●	7(3)(B) **Patterns, relationships, and algebraic thinking.** The student solves problems involving direct proportional relationships. **The student is expected to estimate and find solutions to application problems involving proportional relationships such as similarity, scaling, unit costs, and related measurement units.**	7(4)(D) **Proportionality**. The student applies mathematical process standards to represent and solve problems involving proportional relationships. **The student is expected to solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and percent decrease, and financial literacy problems.** 7(5)(C) **Proportionality.** The student applies mathematical process standards to use geometry to describe or solve problems involving proportional relationships. **The student is expected to solve mathematical and real-world problems involving similar shape and scale drawings.**	The current SE has been separated into two SEs. Revised SE 7(4)(D) focuses on solving problems involving ratios, rates, and percents in addition to financial literacy problems. Revised SE 7(5)(C) focuses on solving problems involving similar figures and scale drawings.	
●	7(4)(A) **Patterns, relationships, and algebraic thinking.** The student represents a relationship in numerical, geometric, verbal, and symbolic form. **The student is expected to generate formulas involving unit conversions within the same system (customary and metric), perimeter, area, circumference, volume, and scaling.**	7(8)(C) **Expressions, equations, and relationships.** The student applies mathematical process standards to develop geometric relationships with volume. **The student is expected to use models to determine the approximate formulas for the circumference and area of a circle and connect the models to the actual formulas.**	Specificity has been added regarding circumference and area of a circle. Content related to this SE was moved from grade 6 in the current SE 6(6)(C) and 6(8)(A). This concept is extended in grade 8 to determine volume of cylinders and cones. Specificity has been added regarding graphing relationships and applying multiple representations to those relationships with constant rates of change.	
○	7(4)(B) **Patterns, relationships, and algebraic thinking.** The student represents a relationship in numerical, geometric, verbal, and symbolic form. **The student is expected to graph data to demonstrate relationships in familiar concepts such as conversions, perimeter, area, circumference, volume, and scaling.**	7(4)(A) **Proportionality**. The student applies mathematical process standards to represent and solve problems involving proportional relationships. **The student is expected to represent constant rates of change in mathematical and real-world problems given pictorial, tabular, verbal, numeric, graphical, and algebraic representations, including *d=rt*.**	Content of these SEs related to unit conversions, perimeter, area, and volume was moved to grade 6: *Proportionality* 6(4)(H) *Expressions, equations, and relationships* 6(8)(B) 6(8)(C) 6(8)(D)	

Content that is deleted by 2012 TEKS | Content that remains or is clarified in 2012 TEKS (●Stay) (●+ Addition) (○ Deletion) | Content that is new in 2012 TEKS

	Old TEKS – Patterns, Relationships, and Algebraic Thinking Strand	Current TEKS (2012)	Supporting Information	Notes
−	7(4)(C) **Patterns, relationships, and algebraic thinking.** The student represents a relationship in numerical, geometric, verbal, and symbolic form. **The student is expected to use words and symbols to describe the relationship between the terms in an arithmetic sequence (with a constant rate of change) and their positions in the sequence.**		The content of this SE was moved to grade 6: *Expressions, equations, and relationships* 6(6)(B)	
●+	7(5)(A) **Patterns, relationships, and algebraic thinking.** The student uses equations to solve problems. **The student is expected to use concrete and pictorial models to solve equations and use symbols to record the actions.**	7(11)(A) **Expressions, equations, and relationships.** The student applies mathematical process standards to solve one-variable equations and inequalities. **The student is expected to model and solve one-variable, two-step equations**	This represents the separation of the current 7(5)(A) into component parts that are developed in grades 6 through 8. Equations and inequalities should include rational number coefficients and constants. This SE is extended into revised SE 7(10)(B) where students are asked to represent the solutions on number lines.	
		and inequalities.	The revised SE extends to include inequalities.	
●+	7(5)(B) **Patterns, relationships, and algebraic thinking.** The student uses equations to solve problems. **The student is expected to formulate problem situations when given a simple equation and formulate an equation when given a problem situation.**	7(10)(A) **Expressions, equations, and relationships.** The student applies mathematical process standards to use one-variable equations and inequalities to represent situations. **The student is expected to write one-variable, two-step equations and inequalities to represent constraints or conditions within problems.**	This represents the separation of the current 7(5)(B) into component parts that are developed in grades 6 through 8. Problems may come from everyday life, society, the workplace, including the application of mathematical concepts such as measurement.	
			The revised SE extends to include inequalities. Constraints or conditions may be indicated by words such as "minimum" or "maximum." Students will need to determine if the value in the solution is part of the solution set or not.	
		7(10)(C) **Expressions, equations, and relationships.** The student applies mathematical process standards to use one-variable equations and inequalities to represent situations. **The student is expected to write a corresponding real-world problem given a one-variable, two-step equation or**	This represents the separation of the current 7(5)(B) into component parts that are developed in grades 6 through 8.	
		inequality.	The revised SE includes inequalities.	

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Old TEKS – Patterns, Relationships, and Algebraic Thinking Strand	Current TEKS (2012)	Supporting Information	Notes
+	7(4)(C) **Proportionality.** The student applies mathematical process standards to represent and solve problems involving proportional relationships. **The student is expected to determine the constant of proportionality ($k = y/x$) within mathematical and real-world problems.**	The constant of proportionality may be a positive rational number.	
+	7(4)(E) **Proportionality**. The student applies mathematical process standards to represent and solve problems involving proportional relationships. **The student is expected to convert between measurement systems, including the use of proportions and the use of unit rates.**	Students are expected to convert between the standard and metric measurement systems rather than within one of the measurement systems. Students are expected to perform these conversions using proportions and using unit rates. For example, when converting 12 inches into its equivalent length in centimeters, a student may write and solve the proportion 12 in/x cm = 1 in/2.54 cm or the student may multiply 12 inches by the unit conversion rate of 2.54 cm/in. This is found in the current SE 8(2)(D).	
+	7(7) **Expressions, equations, and relationships.** The student applies mathematical process standards to represent linear relationships using multiple representations. **The student is expected to represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form $y = mx + b$.**	Revised SE 7(7)(A) is a building block for Revised SEs 8(5)(B) and 8(5)(I). Equations should include rational number coefficients and constants.	
+	7(10)(B) **Expressions, equations, and relationships.** The student applies mathematical process standards to use one-variable equations and inequalities to represent situations. **The student is expected to represent solutions for one-variable, two-step equations and inequalities on number lines.**	This SE extends revised SE 6(9)(B) to include one-variable, two-step equations and inequalities and connects to 7(5)(A) and 7(5)(B).	
+	7(11)(B) **Expressions, equations, and relationships.** The student applies mathematical process standards to solve one-variable equations and inequalities. **The student is expected to determine if the given value(s) make(s) one-variable, two-step equations and inequalities true.**	This SE makes explicit the meaning of a solution to an equation or an inequality. This SE extends revised SE 6(10)(B) to include one-variable, two-step equations and inequalities and connects to 7(5)(A) and 7(5)(B).	

Old TEKS – Patterns, Relationships, and Algebraic Thinking Strand	Current TEKS (2012)	Supporting Information	Notes
+	7(11)(C) **Expressions, equations, and relationships.** The student applies mathematical process standards to solve one-variable equations and inequalities **The student is expected to write and solve equations using geometry concepts, including the sum of the angles in a triangle, and angle relationships.**	This SE extends revised SE 6(10)(A) to include one-variable, two-step equations related to these specific applications and may include concepts developed in 6(8)(A) and 4(7)(E) as contexts.	

	Old TEKS – Geometry and Spatial Reasoning Strand	Current TEKS (2012)	Supporting Information	Notes
–	7(6)(A) **Geometry and spatial reasoning.** The student compares and classifies two- and three-dimensional figures using geometric vocabulary and properties. **The student is expected to use angle measurements to classify pairs of angles as complementary or supplementary.**		The content of this SE was moved to grade 4: *Geometry and measurement* 4(7)(E)	
–	7(6)(B) **Geometry and spatial reasoning.** The student compares and classifies two- and three-dimensional figures using geometric vocabulary and properties. **The student is expected to use properties to classify triangles and quadrilaterals.**		The content of this SE was moved to grade 5: *Geometry and measurement* 5(5)(A)	
–	7(6)(C) **Geometry and spatial reasoning.** The student compares and classifies two- and three-dimensional figures using geometric vocabulary and properties. **The student is expected to use properties to classify three-dimensional figures, including pyramids, cones, prisms, and cylinders.**		The content of this SE was moved to grade 3: *Geometry and measurement* 3(6)(A)	
●	7(6)(D) **Geometry and spatial reasoning.** The student compares and classifies two- and three-dimensional figures using geometric vocabulary and properties. **The student is expected to use critical attributes to define similarity.**	7(5)(A) **Proportionality.** The student applies mathematical process standards to use geometry to describe or solve problems involving proportional relationships. **The student is expected to generalize the critical attributes of similarity, including ratios within and between similar shapes.**	Specificity has been added with the inclusion of the ratios within and between similar shapes.	
–	7(7)(A) **Geometry and spatial reasoning.** The student uses coordinate geometry to describe location on a plane. **The student is expected to locate and name points on a coordinate plane using ordered pairs of integers.**		The content of this SE and the current 8(7)(D) has moved to grade 6: *Measurement and data* 6(11)(A)	
–	7(7)(B) **Geometry and spatial reasoning.** The student uses coordinate geometry to describe location on a plane. **The student is expected to graph reflections across the horizontal or vertical axis and graph translations on a coordinate plane.**		The content of this SE was moved to grade 8: *Two-dimensional shapes* 8(10)(A) 8(10)(C)	
–	7(8)(A) **Geometry and spatial reasoning.** The student uses geometry to model and describe the physical world. **The student is expected to sketch three-dimensional figures when given the top, side, and front views.**		This skill is not included within the Revised TEKS (2012).	

	Old TEKS – Geometry and Spatial Reasoning Strand	Current TEKS (2012)	Supporting Information	Notes
–	7(8)(B) **Geometry and spatial reasoning.** The student uses geometry to model and describe the physical world. **The student is expected to make a net (two-dimensional model) of the surface area of a three-dimensional figure.**		This skill is not included explicitly within the Revised TEKS (2012). In grade 7 with 7(9)(D), students are expected to solve problems involving the lateral and total surface area of a rectangular prism, rectangular pyramid, triangular prism, and triangular pyramid by determining the area of the shape's net. Students may or may not be expected to make the net of a three-dimensional figure.	
–	7(8)(C) **Geometry and spatial reasoning.** The student uses geometry to model and describe the physical world. **The student is expected to use geometric concepts and properties to solve problems in fields such as art and architecture.**		This is subsumed within 7(1)(A) as art and architecture form examples of everyday life, society, and the workplace.	
+		7(5)(B) **Proportionality.** The student applies mathematical process standards to use geometry to describe or solve problems involving proportional relationships. **The student is expected to describe π as the ratio of the circumference of a circle to its diameter.**	This SE was moved to grade 7 from the current grade 6 SE 6(6)(C).	

	Old TEKS – Measurement Strand	Current TEKS (2012)	Supporting Information	Notes
●	7(9)(A) **Measurement.** The student solves application problems involving estimation and measurement. **The student is expected to estimate measurements and solve application problems involving length (including perimeter and circumference) and area of polygons and other shapes.**	7(9)(B) **Expressions, equations, and relationships.** The student applies mathematical process standards to solve geometric problems. **The student is expected to determine the circumference and area of circles.**	The current SE has been separated into two SEs. One focuses on circles while the other focuses on composite figures including semicircles and quarter circles. The development of these formulas takes place within revised SE 7(8)(C). 7(9)(C) adds specificity to the current SE with the identification of composite figures instead of "polygons and other shapes."	
		7(9)(C) **Expressions, equations, and relationships.** The student applies mathematical process standards to solve geometric problems. **The student is expected to determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles and quarter circles.**		
–	7(9)(B) **Measurement.** The student solves application problems involving estimation and measurement. **The student is expected to connect models for volume of prisms (triangular and rectangular) and cylinders to formulas of prisms (triangular and rectangular) and cylinders.**		The content of this SE was moved to grade 5 for rectangular prisms and grade 8 for cylinders: *Algebraic reasoning* 5(4)(G) *Geometry and measurement* 5(6)(B) *Expressions, equations, and relationships* 8(6)(A) Connecting models to formulas for volume of triangular prisms is not explicitly stated in the Revised TEKS (2012). The formula $V=Bh$ is introduced in grade 5.	
●+	7(9)(C) **Measurement.** The student solves application problems involving estimation and measurement. **The student is expected to estimate measurements and solve application problems involving volume of prisms (rectangular and triangular) and cylinders.**	7(9)(A) **Expressions, equations, and relationships.** The student applies mathematical process standards to solve geometric problems. **The student is expected to solve problems involving the volume of rectangular prisms, triangular prisms,**	Side lengths may be positive rational numbers.	
		rectangular pyramids, and triangular pyramids.	The development of these formulas takes place within revised SE 7(8)(A) and 7(8)(B).	
			Determining the volume of a cylinder is now a specified skill in grade 8: *Expressions, equations, and relationships* 8(6)(A) 8(6)(B)	

Content that is deleted by 2012 TEKS | Content that remains or is clarified in 2012 TEKS (● Stay) (●+ Addition) (● Deletion) | Content that is new in 2012 TEKS

Old TEKS – Measurement Strand	Current TEKS (2012)	Supporting Information	Notes
+	7(8)(A) **Expressions, equations, and relationships.** The student applies mathematical process standards to develop geometric relationships with volume. **The student is expected to model the relationship between the volume of a rectangular prism and a rectangular pyramid having both congruent bases and heights and connect that relationship to the formulas.**	Solving problems involving the volume of rectangular and triangular pyramids has been added with 7(9)(A). Connecting models of prisms and pyramids to formulas for volume is in the current 8(8)(B) and is moving to Revised TEKS 7(9)(A). Connecting models of cylinders and cones to formulas for volume remains in grade 8. This SE supports Revised TEKS 7(9)(A).	
+	7(8)(B) **Expressions, equations, and relationships.** The student applies mathematical process standards to develop geometric relationships with volume. **The student is expected to explain verbally and symbolically the relationship between the volume of a triangular prism and a triangular pyramid having both congruent bases and heights and connect that relationship to the formulas.**	The revised SE 7(8)(B) represents the current 8(8)(B).	
+	7(9)(D) **Expressions, equations, and relationships.** The student applies mathematical process standards to solve geometric problems. **The student is expected to solve problems involving the lateral and total surface area of a rectangular prism, rectangular pyramid, triangular prism, and triangular pyramid by determining the area of the shape's net.**	The content of this SE comes from grade 8 Measurement 8(8)(A)	

	Old TEKS – Probability and Statistics Strand	Current TEKS (2012)	Supporting Information	Notes
●	7(10)(A) **Probability and statistics.** The student recognizes that a physical or mathematical model (including geometric) can be used to describe the experimental and theoretical probability of real-life events. **The student is expected to construct sample spaces for simple or composite experiments.**	7(6)(A) **Proportionality.** The student applies mathematical process standards to use probability and statistics to describe or solve problems involving proportional relationships. **The student is expected to represent sample spaces for simple and compound events using lists and tree diagrams.**	Instead of referencing "experiments," the revised SE uses the more appropriate term "events." Specificity has been added with the representations to be used to construct and represent the samples spaces: lists and tree diagrams. The content related to this SE was moved to the Revised TEKS (2012) Proportionality strand to support learning with probability.	
			The revised SE includes dependent compound events.	
●+	7(10)(B) **Probability and statistics.** The student recognizes that a physical or mathematical model (including geometric) can be used to describe the experimental and theoretical probability of real-life events. **The student is expected to find the probability of independent events.**	7(6)(C) **Proportionality.** The student applies mathematical process standards to use probability and statistics to describe or solve problems involving proportional relationships. **The student is expected to make predictions and determine solutions using experimental data for simple and compound events**. 7(6)(D) **Proportionality.** The student applies mathematical process standards to use probability and statistics to describe or solve problems involving proportional relationships. **The student is expected to make predictions and determine solutions using theoretical probability for simple and compound events.** 7(6)(I) **Proportionality.** The student applies mathematical process standards to use probability and statistics to describe or solve problems involving proportional relationships. **The student is expected to determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces.**	Specificity has been added: students are expected to know how to determine both experimental and theoretical probabilities. Specificity has been added regarding as to the strategy used to determine the probabilities. Data should be used for experimental probabilities and sample spaces should be used for theoretical probabilities. The content related to this SE was moved to the Revised TEKS (2012) Proportionality strand to support connections between probabilistic events and proportional reasoning.	
			The revised SE includes the current 6(9)(B) with simple events. The revised SE includes the current 8(11)(A) and 8(11)(B) with dependent compound events. The revised SE 7(6)(H) represents a foundation piece for these SEs.	

	Old TEKS – Probability and Statistics Strand	Current TEKS (2012)	Supporting Information	Notes
—	7(11)(A) **Probability and statistics.** The student understands that the way a set of data is displayed influences its interpretation. **The student is expected to select and use an appropriate representation for presenting and displaying relationships among collected data, including line plot, line graph, bar graph, stem and leaf plot, circle graph, and Venn diagrams, and justify the selection.**		Representing and drawing conclusions with data has moved to prior grades: • Line plots have been renamed dot plots: grades 3, 4, 5, 6 • Bar graphs: grades 1, 2, 3, 5 • Stem and leaf plots: grades 4, 5, 6 Circle graphs have been integrated into *Proportionality* 7(6)(G) Venn diagrams are implicit in 7(1)(D) with the use of diagrams to communicate mathematical ideas and reasoning. Line graphs do not appear in the Revised TEKS (2012).	
●	7(11)(B) **Probability and statistics.** The student understands that the way a set of data is displayed influences its interpretation. **The student is expected to make inferences and convincing arguments based on an analysis of given or collected data.**	7(6)(F) **Proportionality.** The student applies mathematical process standards to use probability and statistics to describe or solve problems involving proportional relationships. **The student is expected to use data from a random sample to make inferences about a population.**	Specificity has been added regarding the given or collected data. The data should be from a random sample. Specificity has been added regarding inferences. The inferences should be about the population from which the random sample was taken and should reflect the use of proportional reasoning.	
		7(12)(B) **Measurement and data.** The student applies mathematical process standards to use statistical representations to analyze data. **The student is expected to use data from a random sample to make inferences about a population.**	Specificity has been added regarding the given or collected data. The data should result from a random sample. Specificity has been added regarding inferences. The focus is on inferences related to a population. When paired with revised SE 7(1)(D),the expectation is that students evaluate inferences about a population.	
—	7(12)(A) **Probability and statistics.** The student uses measures of central tendency and variability to describe a set of data. **The student is expected to describe a set of data using mean, median, mode, and range.**		The content of this SE was moved to grade 6: *Measurement and data* 6(12)(B) 6(12)(C) 6(12)(D)	
—	7(12)(B) **Probability and statistics.** The student uses measures of central tendency and variability to describe a set of data. **The student is expected to choose among mean, median, mode, or range to describe a set of data and justify the choice for a particular situation.**		This skill is not included within the Revised TEKS (2012).	

	Old TEKS – Probability and Statistics Strand	Current TEKS (2012)	Supporting Information	Notes
+		7(6)(B) **Proportionality.** The student applies mathematical process standards to use probability and statistics to describe or solve problems involving proportional relationships. **The student is expected to select and use different simulations to represent simple and compound events with and without technology.**	The revised SE 7(6)(B) represents the current SE 8(11)(C). Specificity has been added with simple and compound events.	
+				
+		7(6)(E) **Proportionality.** The student applies mathematical process standards to use probability and statistics to describe or solve problems involving proportional relationships. **The student is expected to find the probabilities of a simple event and its complement and describe the relationship between the two.**	The revised SE 7(6)(E) represents the current SE6(9)(B).	
+		7(6)(G) **Proportionality.** The student applies mathematical process standards to use probability and statistics to describe or solve problems involving proportional relationships. **The student is expected to solve problems using data represented in bar graphs, dot plots, and circle graphs, including part-to-whole and part-to-part comparisons and equivalents.**	Solving problems using represented data has moved to the Proportionality strand. The focus of the problems will be on the proportional relationships within the data. Specificity regarding these proportional relationships has been added with "part-to-whole and part-to-part comparisons and equivalents." The representations in the revised SE 7(6)(G) represents the current 7(11)(A).	
+		7(6)(H) **Proportionality.** The student applies mathematical process standards to use probability and statistics to describe or solve problems involving proportional relationships. **The student is expected to solve problems using qualitative and quantitative predictions and comparisons from simple experiments.**	The revised SE 7(6)(H) extends the current 6(9)(B) and the revised SE 7(6)(E) to include qualitative comparisons such as "more likely" or "less likely" in addition to quantitative comparisons such as "twice as likely to roll a 6 on a 6-sided random number generator as to roll a 6 on a 12-sided random number generator." It also includes qualitative predictions such as "more likely," "less likely," or "equally likely" in addition to quantitative predictions such as the experimental results of rolling a 6 if rolling 10 times or 100 times.	
+		7(12)(A) **Measurement and data.** The student applies mathematical process standards to use statistical representations to analyze data. **The student is expected to compare two groups of numeric data using comparative dot plots or box plots by comparing their shapes, centers, and spreads.**	The revised SEs 6(12)(A), 6(12)(B), and 6(12)(C) expect students to represent data using dot plots and box plots and describe the center, shape, and spread of the data distribution.	

	Old TEKS – Probability and Statistics Strand	Current TEKS (2012)	Supporting Information	Notes
+		7(12)(C) **Measurement and data.** The student applies mathematical process standards to use statistical representations to analyze data. **The student is expected to compare two populations based on data in random samples from these populations, including informal comparative inferences about differences between the two populations.**	By combining the proportional reasoning from 7(6)(F) and the connections between samples and populations from 7(12)(B) the expectation is that students make informal comparative inferences about differences between the two populations. One might compare the means of both sets of data from random samples. One might compare the shape, center, and spread of data from random samples using comparative dot plots or comparative box plots to make inferences about the two populations. The revised SE 8(11)(B) requires students to determine the mean absolute deviation which extends this idea.	

<table>
<tr><th></th><th>Old TEKS – Underlying Processes and Mathematical Tools Strand</th><th>Current TEKS (2012)</th><th>Supporting Information</th><th>Notes</th></tr>
<tr><td>●</td><td>7(13)(A) Underlying processes and mathematical tools. The student applies Grade 7 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.

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.</td><td>7(1)(A) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding.

The student is expected to apply mathematics to problems arising in everyday life, society, and the workplace.</td><td>The focus has shifted to application.

The opportunities for application have been consolidated into three areas: everyday life, society, and the workplace.

This SE, when tagged to a content SE, allows for increased rigor through connections outside the discipline.</td><td></td></tr>
<tr><td>●</td><td>7(13)(B) Underlying processes and mathematical tools. The student applies Grade 7 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.

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.</td><td rowspan="2">7(1)(B) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding.

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.</td><td rowspan="2">The 2012 SE restates and condenses the current 7(13)(B) and 7(13)(C).

Problem-Solving Model<table><tr><th>Current TEKS</th><th>Revised TEKS (2012)</th></tr><tr><td>Understanding the problem</td><td>Analyzing given information</td></tr><tr><td>Making a plan</td><td>Formulating a plan or strategy</td></tr><tr><td>Carrying out the plan</td><td>Determining a solution</td></tr><tr><td></td><td>Justifying the solution</td></tr><tr><td>Evaluating the solution for reasonableness</td><td>Evaluating the problem-solving process and the reasonableness of the solution</td></tr></table></td><td rowspan="2"></td></tr>
<tr><td>●</td><td>7(13)(C) Underlying processes and mathematical tools. The student applies Grade 7 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.

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.</td></tr>
<tr><td>●</td><td>7(13)(D) Underlying processes and mathematical tools. The student applies Grade 7 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.

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.</td><td>7(1)(C) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding.

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.</td><td>The phrase “as appropriate” has been inserted into the revised SE. This implies that students are assessing which tool to apply rather than trying only one or all.</td><td></td></tr>
</table>

Content that is deleted by 2012 TEKS | Content that remains or is clarified in 2012 TEKS (●Stay) (●+ Addition) (⭘ Deletion) | Content that is new in 2012 TEKS

	Old TEKS – Underlying Processes and Mathematical Tools Strand	Current TEKS (2012)	Supporting Information	Notes
●	7(14)(A) **Underlying processes and mathematical tools.** The student communicates about Grade 7 mathematics through informal and mathematical language, representations, and models. **The student is expected to communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models.**	7(1)(D) **Mathematical process standards.** The student uses mathematical processes to acquire and demonstrate mathematical understanding. **The student is expected to communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.**	Communication has expanded to include reasoning and the implications of mathematical ideas and reasoning. The list of representations is now summarized with "multiple representations" with specificity added for symbols and diagrams.	
●	7(14)(B) **Underlying processes and mathematical tools.** The student communicates about Grade 7 mathematics through informal and mathematical language, representations, and models. **The student is expected to evaluate the effectiveness of different representations to communicate ideas.**	7(1)(E) **Mathematical process standards.** The student uses mathematical processes to acquire and demonstrate mathematical understanding. **The student is expected to create and use representations to organize, record, and communicate mathematical ideas.**	The use of representations is extended to include organizing and recording mathematical ideas in addition to communicating. As students use and create representations, it is implied that they will evaluate the effectiveness of their representations to ensure that they are communicating mathematical ideas clearly.	
●	7(15)(A) **Underlying processes and mathematical tools.** The student uses logical reasoning to make conjectures and verify conclusions. **The student is expected to make conjectures from patterns or sets of examples and nonexamples.**	7(1)(F) **Mathematical process standards.** The student uses mathematical processes to acquire and demonstrate mathematical understanding. **The student is expected to analyze mathematical relationships to connect and communicate mathematical ideas.**	The revised SE extends the current SE to allow for additional means to analyze relationships and to form connections with mathematical ideas past conjecturing and sets of examples and non-examples. Students should still form conjectures based on patterns or sets of examples and non-examples.	
●	7(15)(B) **Underlying processes and mathematical tools.** The student uses logical reasoning to make conjectures and verify conclusions. **The student is expected to validate his/her conclusions using mathematical properties and relationships.**	7(1)(G) **Mathematical process standards.** The student uses mathematical processes to acquire and demonstrate mathematical understanding. **The student is expected to display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.**	The revised SE clarifies "validates his/her conclusions" with displays, explanations, and justifications. The conclusions should focus on mathematical ideas and arguments. Precise mathematical language is expected.	

Old TEKS	Current TEKS (2012)	Supporting Information	Notes
+	7(13)(A) **Personal financial literacy.** 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. **The student is expected to calculate the sales tax for a given purchase and calculate income tax for earned wages.**		
+	7(13)(B) **Personal financial literacy.** 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. **The student is expected to identify the components of a personal budget, including income, planned savings for college, retirement, and emergencies, taxes, and fixed and variable expenses, and calculate what percentage each category comprises of the total budget.**		
+	7(13)(C) **Personal financial literacy.** 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. **The student is expected to create and organize a financial assets and liabilities record and construct a net worth statement.**		
+	7(13)(D) **Personal financial literacy.** 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. **The student is expected to use a family budget estimator to determine the minimum household budget and average hourly wage needed for a family to meet its basic needs in the student's city or another large city nearby.**		
+	7(13)(E) **Personal financial literacy.** 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. **The student is expected to calculate and compare simple interest and compound interest earnings.**		

Old TEKS	Current TEKS (2012)	Supporting Information	Notes
+	7(13)(F) **Personal financial literacy.** 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. **The student is expected to analyze and compare monetary incentives, including sales, rebates, and coupons.**		