

Components:

- TE-UPI (Teacher Edition: Part 1 - Unit Program Information) [10 units – first part of TE]
- TE-AK (Teacher Edition: Part 2 - Enhanced Answer Key) [10 units – second part of TE]
- SP (Student Packets) [10 units]
- PI (Program Information)
- Portal (Online Portal Resources)

2025 California Common Core State Standards: Mathematics Adoption¹

Standards Map Template

Grade Eight

Organization Around Major Conceptual Ideas

Evaluation criterion statement 1.2 requires that programs be consistent with the content of the 2023 *Mathematics Framework for California Public Schools, Kindergarten Through Grade Twelve (Mathematics Framework)*. In order to be considered suitable for adoption by the State Board of Education, a publisher's or developer's program must present content organized around major conceptual ideas, as demonstrated in chapters 6, 7, and 8, and as described in the Publishers and Content Developers Guide to the Mathematics Framework, found in chapter 13 of the *Mathematics Framework*.

1. Publishers/developers should use the first column of this table to list the major conceptual ideas used to organize the instructional program.
2. In the second column, publishers/developers should show how these relate to the Framework's Big Ideas.
3. In the third column, publishers/developers should show the organization of the program by showing how the content standards are mapped to each of the major conceptual ideas or Big Ideas used by the program.

¹ The California Common Core State Standards: Mathematics were adopted by the State Board of Education on August 2, 2010, (and modified pursuant to Senate Bill 1200 on January 16, 2013). This standards map is organized by Big Idea and Content Connections in alignment with the *Mathematics Framework for California Public Schools: Kindergarten Through Grade Twelve*, approved by the State Board of Education on July 12, 2023.

Major conceptual ideas in the program	How do the program's major conceptual ideas map to the framework's Big Ideas?	How are standards covered under the major conceptual ideas?	Met Yes	Met No	Reviewer Notes
Complete the real number system (8.NS.A)	<ul style="list-style-type: none"> • Big and small numbers • Cylindrical investigations • Pythagorean explorations • Shape, number, and expressions 	The Standards for each lesson are listed in the gray box at the beginning of each lesson in the Teacher's Edition (TE-AK) and Student Packet (SP) .			
Explore exponents and roots, and very large and very small quantities (8.EE.A)	<ul style="list-style-type: none"> • Big and small numbers • Interpret scatter plots • Pythagorean explorations • Shape, number, and expressions 				
Create, analyze, and use linear functions in problem-solving (8.EE.B, 8.F.AB)	<ul style="list-style-type: none"> • Data explorations • Data graphs and tables • Interpret scatter plots • Linear equations • Multiple representations of functions • Slopes and intercepts 	See "Unit Overviews (pgs 2-3) in Program Information (PI) for the relationship between <i>MathLink's</i> Big Ideas, Content Standards, and Units of Study.			
Solve linear equations in one variable and linear systems in two variables (8.EE.C)	<ul style="list-style-type: none"> • Linear equations • Multiple representations of functions • Slopes and intercepts 				
Use transformational geometry to investigate congruence and similarity (8.G.A)	<ul style="list-style-type: none"> • Shape, number, and expressions • Transformational Geometry 	See "Big Ideas and Connections" in Teaching Tips of the Teacher Edition (TE-UPI) (there is one for each unit) for a graphic that provides a snapshot of the big ideas included in each unit and their connections to each other.			
Discover and apply properties of lines, angles, and triangles, including the Pythagorean Theorem (8.G.B)	<ul style="list-style-type: none"> • Pythagorean explorations • Shape, number, and expressions • Transformational Geometry 				
Extend applications of volume to cylinders, cones, and spheres (8.G.C)	<ul style="list-style-type: none"> • Cylindrical investigations • Shape, number, and expressions 				
Explore bivariate data (8.SP.A)	<ul style="list-style-type: none"> • Data explorations • Data graphs and tables • Interpret scatter plots 	See "Reflection" at the end of each Review section in the Teacher Edition (TE-AK) or Student Packet (SP) (there is one for each unit) for a student exercise that connects big ideas in the unit.			

Publishers/developers should be aware of how major conceptual ideas develop from one grade to the next. For charts detailing the progression of the *Mathematics Framework's* Big Ideas throughout the grade levels, see [chapter 6](#) (TK–grade two and grades 3–5) and [chapter 7](#) (grades 6–8).

State-adopted instructional materials help teachers to present and students to learn the content set forth in the *California Common Core State Standards for Mathematics with California Additions*, which include both the content standards and the standards for mathematical practice (SMPs). Publishers/developers should use the following tables to provide page number citations or other references that demonstrate alignment with the SMPs and content standards.

Standards for Mathematical Practice

Codes: TE-UPI Teacher Edition Unit Program Information
TE-AK = Teacher's Edition Answer Key

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
MP.1	Make sense of problems and persevere in solving them.	<ul style="list-style-type: none"> Units 1-10 TE-UPI, page varies (Applying Standards for Mathematical Practice) [<i>SMP1</i>] Unit 1 TE-AK pgs 1 + 1ab + 5 (The Opening Problem: Paper Solids + Lesson Notes + Practice 2: Extend Your Thinking) Unit 4 TE-AK pgs 1 + 1ab (The Opening Problem: Slides and Jumps + Lesson Notes) Unit 7 TE-AK pgs 10 + 10ab (Estimating Solutions to Systems + Lesson Notes) Unit 9 TE-AK pgs 20, 21 (Swimming at the River) 			
MP.2	Reason abstractly and quantitatively.	<ul style="list-style-type: none"> Units 1-10 TE-UPI, page varies (Applying Standards for Mathematical Practice) [<i>SMP2</i>] Unit 2 TE-AK pgs 6 + 15 (Getting Started Maxie and Minnie + Revisiting Maxie and Minnie) Unit 6 TE-AK pgs 4 + 4a (Linear Association + Lesson Notes) Unit 8 TE-AK pgs 16 + 16 a + 19 (Talia's Coin Jar + Lesson Notes + Training for a Marathon) 			

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
MP.3	Construct viable arguments and critique the reasoning of others.	<ul style="list-style-type: none"> • Units 1-10 TE-UPI, page varies (Applying Standards for Mathematical Practice) [<i>SMP3</i>] • Unit 2 TE-AK pgs 1 + 1a + 16 + 16a (A Rectangle Paradox + Lesson Notes + Revisiting a Rectangle Paradox + Lesson Notes) • Unit 6 TE-AK pgs 4 + 4a + 10 + 10a (Linear Association + Lesson Notes + Education Data Revisited + Lesson Notes) • Unit 7 TE-AK pgs 6 #1, 2 + 11 #3 (Practice 2 + Practice 4) • Unit 9 TE-AK pgs 5, 6 + 6a (Translations with Coordinates + Lesson Notes) [<i>Slide 3</i>] 			
MP.4	Model with mathematics.	<ul style="list-style-type: none"> • Units 1-10 TE-UPI, page varies (Applying Standards for Mathematical Practice) [<i>SMP4</i>] • Unit 1 TE-AK pg 9 (Ice Cream Cones) • Unit 5 TE-AK pgs 1 + 1a (The Rope Investigation + Lesson Notes) • Unit 6 TE-AK pgs 1, 2 + 2a (Stacking Cups + Lesson Notes) 			

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
MP.5	Use appropriate tools strategically.	<ul style="list-style-type: none"> Units 1-10 TE-UPI, page varies (Applying Standards for Mathematical Practice) [<i>SMP5</i>] Unit 4 TE-AK pgs 1 + 1a + 4 + 4a + 26 (Slides and Jumps + Lesson Notes, The Pool Problem + Lesson Notes, Poster Problems) [<i>manipulatives</i>] Unit 7 TE-AK pg 21 (Practice 8) [<i>cups/counters optional</i>] Unit 8 TE-AK pgs 3 + 3ab (Can You Solve These in Two Ways? + Lesson Notes) Unit 9 TE-AK pgs 1 + 1ab (Slides, Turns, and Flips + Lesson Notes) [<i>Slides 1, 2, 3, 4 - instruction for a new tool</i>] 			
MP.6	Attend to precision.	<ul style="list-style-type: none"> Units 1-10 TE-UPI, page varies (Applying Standards for Mathematical Practice) [<i>SMP6</i>] Unit 5 TE-AK pg 17 (Rectangle Paradox: A Fresh Look) Unit 7 TE-AK pgs 14 + 14ab (Cups, Counters, and Balance + Lesson Notes) [<i>opposite of x</i>] Unit 10 TE-AK pgs 4, 5 + 5a (About Dilations + Lesson Notes) 			

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
MP.7	Look for and make use of structure.	<ul style="list-style-type: none"> Units 1-10 TE-UPI, page varies (Applying Standards for Mathematical Practice) [<i>SMP7</i>] Unit 3 TE-AK pgs 3 + 3ab + 5-6 (Investigating Two Exponent Patterns + Lesson Notes + A Third Pattern: The Quotient Rule For Exponents) Unit 7 TE-AK pgs 16 + 16abc + 17 + 17ab (Solving Equations with Balance 1 + Lesson Notes + Solving Equations with Balance 2 + Lesson Notes) Unit 8 TE-AK pgs 1 + 1ab (Number Tricks + Lesson Notes) Unit 10 TE-AK pgs 6-7 + 11 + 11ab (Dilations in the Coordinate Plane + About Similarity + Lesson Notes) 			
MP.8	Look for and express regularity in repeated reasoning.	<ul style="list-style-type: none"> Units 1-10 TE-UPI, page varies (Applying Standards for Mathematical Practice) [<i>SMP8</i>] Unit 2 TE-AK pg 20 (A Rational Numbers Investigation) Unit 5 TE-AK pgs 1 + 1a + 15 + 15a (The Rope Investigation + Lesson Notes + The Rope Revisited + Lesson Notes) Unit 9 TE-AK pgs 20-21 (Swimming at the River) [<i>repeated calculations</i>] Unit 10 TE-AK pgs 6-7, 11 + 11ab (Dilations in the Coordinate Plane + About Similarity + Lesson Notes) 			

Grade-level Content Standards

Domain: The Number System

Cluster: Know that there are numbers that are not rational, and approximate them by rational numbers.

How does the program address this aspect of the domain?

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.NS.1	Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.	<p>Included in 2.3</p> <ul style="list-style-type: none"> • Unit 2 TE-AK pg 20 (A Rational Number Investigation) • Unit 2 TE-AK pg 21 (How Can $0.999...=1$?) • Unit 2 TE-AK pgs 22 + 22a (The Real Number System + Lesson Notes) • Unit 2 TE-AK pgs 23-24 #1, 5a (Practice 6) 			
8.NS.2	Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions.	<p>Included in 2.1, 2.3</p> <ul style="list-style-type: none"> • Unit 2 TE-AK pg 3 #4 (A Radical Investigation) • Unit 2 TE-AK pg 4 #3-5 (Practice 1) • Unit 2 TE-AK pg 5 #3-7 (Practice 2) • Unit 2 TE-AK pg 25 (Another Well- Known Irrational Number) 			

Domain: Expressions and Equations

Cluster: Work with radicals and integer exponents.

How does the program address this aspect of the domain?

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.EE.1	Know and apply the properties of integer exponents to generate equivalent numerical expressions.	<p>Included in 3.1</p> <ul style="list-style-type: none"> Unit 3 TE-AK pg 3 (Investigating Two Exponent Patterns) Unit 3 TE-AK pg 4 #2-7, 9-14 (Practice 1) Unit 3 TE-AK pg 8 #1 (Practice 3) 			
8.EE.2	Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes.	<p>Included in 2.1, 3.3, 10.1, 10.2, 10.3</p> <ul style="list-style-type: none"> Unit 2 TE-AK pg 4 #2-4 (Practice 1) Unit 3 TE-AK, pg 18 #6-9 (Exponents and Roots Getting Started) Unit 3 TE-AK pg 20 (Practice 8) Unit 3 TE-AK pg 21 (Solving Equations with Exponents) Unit 3 TE-AK pg 22 (Practice 9) Unit 10 TE-AK pg 3 #2-5 (Dilations Getting Started) 			

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.EE.3	Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other.	<p>Included in 3.2</p> <ul style="list-style-type: none"> • Unit 3 TE-AK pg 11 #5 (What in the World?) • Unit 3 TE-AK pg 13 #9a,9c (Practice 5) • Unit 3 TE-AK pg 14 #1-5 (A Gut Feeling) • Unit 3 TE-AK pg 15 #7-9 (Practice 6) • Unit 3 TE-AK pgs16 #1, 4, 5 + R3-1 (Big and Small Jigsaw) • Unit 3 TE-AK pg 17 #9c, 10 (Practice 7: Extend Your Thinking) 			
8.EE.4	Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities. Interpret scientific notation that has been generated by technology.	<p>Included in 3.2</p> <ul style="list-style-type: none"> • Unit 3 TE-AK pgs 11-12 #4-13 (What in the World?) • Unit 3 TE-AK pg 13 #3-11 (Practice 5) • Unit 3 TE-AK pg 14 #3-6 (A Gut Feeling) • Unit 3 TE-AK pg 15 #1-6, 10, 11 (Practice 6) • Unit 3 TE-AK pgs 16 #3 + R3-1 (Big and Small Jigsaw) • Unit 3 TE-AK pg 17 (Practice 7: Extend Your Thinking) 			

Cluster: Understand the connections between proportional relationships, lines, and linear equations.

How does the program address this aspect of the domain?

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.EE.5	Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways.	<p>Included in 4.1, 4.3</p> <ul style="list-style-type: none"> Unit 4 TE-AK pg 3 (Interpreting Tables, Equations, and Graphs) [<i>introductory</i>] Unit 4 TE-AK pgs 6-7 # 1, 8, 9 (Practice 1) Unit 4 TE-AK pgs 19-20 #1, 5, 7-11 (To School and Back Home) Unit 4 TE-AK pg 21 (Practice 6) Unit 5 TE-AK pg 19 #11 (Practice 8) 			
8.EE.6	Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b .	<p>Included in 5.1, 5.2, 5.3, 10.3</p> <ul style="list-style-type: none"> Unit 5 TE-AK pg 7 (Practice 3) Unit 5 TE-AK pg 9 #3-5 (Slope-Intercept Form Getting Started) Unit 5 TE-AK pgs 10 #1-9 + 10ab (Finding Equations of Lines + Lesson Notes) Unit 5 TE-AK pg 11 #1-5 (Analyzing Equations of Lines) Unit 5 TE-AK pg 21 (Deriving Equations of Lines) Unit 10 TE-AK pgs 20 + 20ab (Similarity and Slope + Lesson Notes) 			

Cluster: Analyze and solve linear equations and pairs of simultaneous linear equations.

How does the program address this aspect of the domain?

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.EE.7a	Solve linear equations in one variable. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers).	Included in 7.2, 7.3, 8.1 <ul style="list-style-type: none"> Unit 7 TE-AK pg 22 (Do All Equations Have Exactly One Solution?) Unit 7 TE-AK pg 23 (Practice 9) Unit 8 TE-AK pg 4 (Practice 1) 			
8.EE.7b	Solve linear equations in one variable. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.	Included in 7.2, 7.3, 8.1, 8.3 <ul style="list-style-type: none"> Unit 7 TE-AK pg 21 #2, 4-7 (Practice 8) Unit 8 TE-AK pg 4 #3-7 (Practice 1) Unit 8 TE-AK pg 5 #2, 4-7 (Practice 2) 			
8.EE.8a	Analyze and solve pairs of simultaneous linear equations. Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.	Included in 7.1, 8.2 <ul style="list-style-type: none"> Unit 7 TE-AK pgs 3-4 (What is a System of Equations?) Unit 7 TE-AK pg 5 (Practice 1) 			
8.EE.8b	Analyze and solve pairs of simultaneous linear equations. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection.	Included in 7.1, 8.2, 8.3 <ul style="list-style-type: none"> Unit 7 TE-AK pg 6 (Practice 2) Unit 7 TE-AK pgs 7-8 + 8ab (Using Substitution + Lesson Notes) Unit 7 TE-AK pg 11 (Practice 4) Unit 8 TE-AK pg 8 (Practice 3) 			

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.EE.8c	Analyze and solve pairs of simultaneous linear equations. Solve real-world and mathematical problems leading to two linear equations in two variables.	<p>Included in 7.1, 8.3</p> <ul style="list-style-type: none"> • Unit 7 TE-AK pg 9 (Practice 3) • Unit 8 TE-AK pgs 14 + 14abc + R8-2 (Watering Cans + Lesson Notes) • Unit 8 TE-AK pg 21 (Extend Your Thinking: Tacos, Burritos, and Guac...Oh My!) 			

Domain: Functions

Cluster: Define, evaluate, and compare functions.

How does the program address this aspect of the domain?

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.F.1	Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output. ²	<p>Included in 4.2, 4.3, 9.1</p> <ul style="list-style-type: none"> • Unit 4 TE-AK pgs 12-13 + 13ab (What is a Function? + Lesson Notes) • Unit 4 TE-AK pg 14 (Pets and Apartments) • Unit 4 TE-AK pg 15 (Practice 3) • Unit 9 TE-AK pg 1a (Lesson Notes 9.0: Slides, Flips, and Turns) [<i>transformation defined as a function</i>] 			

² Function notation is not required in grade eight.

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.F.2	Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).	<p>Included in 4.1, 4.3, 5.2, 5.3, 7.1, 8.3</p> <ul style="list-style-type: none"> • Unit 4 TE-AK, pg 4 (The Pool Problem) • Unit 4 TE-AK pg 5 (Analyzing the Pool Problem) • Unit 4 TE-AK pg 10 (Practice 2) • Unit 5 TE-AK pgs 23 + R5-1 (Matching Activity: Linear Function Representations) 			
8.F.3	Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear.	<p>Included in 4.1, 4.2, 4.3, 5.2, 5.3, 7.1, 8.2, 8.3, 10.3</p> <ul style="list-style-type: none"> • Unit 4 TE-AK pg 4 (The Pool Problem) • Unit 4 TE-AK pg 5 (Analyzing the Pool Problem) • Unit 4 TE-AK pgs 12 #4 + 13b (What is a Function? + Lesson Notes) • Unit 5 TE-AK pg 11 #1-5 (Analyzing Equations of Lines) • Unit 5 TE-AK pg 13 (Practice 6) 			

Cluster: Use functions to model relationships between quantities.

How does the program address this aspect of the domain?

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.F.4	Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.	<p>Included in 4.1, 4.3, 5.1, 5.2, 5.3, 6.2, 7.1, 8.3</p> <ul style="list-style-type: none"> • Unit 4 TE-AK pg 8 (Saving vs Spending) • Unit 4 TE-AK pg 9 (Analyzing Saving vs Spending) • Unit 4 TE-AK pg 10 (Practice 2) • Unit 4 TE-AK pgs 19-20 (To School and Back Home) • Unit 4 TE-AK pg 21 (Practice 6) 			

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.F.5	Describe qualitatively the functional relationship between two quantities by analyzing a graph. Sketch a graph that exhibits the qualitative features of a function that has been described verbally.	<p>Included in 4.2, 4.3, 5.3, 6.2</p> <ul style="list-style-type: none"> • Unit 4 TE-AK pg 16 (Practice 4) • Unit 4 TE-AK pg 17 (Practice 5) • Unit 4 TE-AK pgs 19-20 #1, 7 (To School and Back Home) • Unit 4 TE-AK pg 23 (The Bath Graph) • Unit 4 TE-AK pg 24 #1 (The Rollercoaster) 			

Domain: Geometry

Cluster: Understand congruence and similarity using physical models, transparencies, or geometry software.

How does the program address this aspect of the domain?

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.G.1a	Verify experimentally the properties of rotations, reflections, and translations: Lines are taken to lines, and line segments to line segments of the same length.	<p>Included in 9.1, 9.2, 9.3</p> <ul style="list-style-type: none"> • Unit 9 TE-AK pgs 3 + 3ab (About Translations + Lesson Notes) • Unit 9 TE-AK pgs 9 + 9ab (About Rotations + Lesson Notes) • Unit 9 TE-AK pgs 13 + 13ab (About Reflections + Lesson Notes) 			
8.G.1b	Verify experimentally the properties of rotations, reflections, and translations: Angles are taken to angles of the same measure.	<p>Included in 9.1, 9.2, 9.3</p> <ul style="list-style-type: none"> • Unit 9 TE-AK pgs 3 + 3ab (About Translations + Lesson Notes) • Unit 9 TE-AK pgs 9 + 9ab (About Rotations + Lesson Notes) • Unit 9 TE-AK pgs 13 + 13ab (About Reflections + Lesson Notes) 			

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.G.1c	Verify experimentally the properties of rotations, reflections, and translations: Parallel lines are taken to parallel lines.	<p>Included in 9.1, 9.2, 9.3</p> <ul style="list-style-type: none"> • Unit 9 TE-AK pgs 3 + 3ab (About Translations + Lesson Notes) • Unit 9 TE-AK pgs 9 + 9ab (About Rotations + Lesson Notes) • Unit 9 TE-AK pgs 13 + 13ab (About Reflections + Lesson Notes) 			
8.G.2	Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.	<p>Included in 9.3</p> <ul style="list-style-type: none"> • Unit 9 TE-AK pgs 16-17 (About Congruence) • Unit 9 TE-AK pgs 18-19 #1, 7, 8 (Practice 7) 			
8.G.3	Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.	<p>Included in 9.1, 9.2, 9.3, 10.1</p> <ul style="list-style-type: none"> • Unit 9 TE-AK pg 7 (Practice 2) • Unit 9 TE-AK pg 11 (Practice 4) • Unit 9 TE-AK pg 15 (Practice 6) • Unit 10 TE-AK pgs 8-9 (Practice 1) 			
8.G.4	Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.	<p>Included in 10.2</p> <ul style="list-style-type: none"> • Unit 10 TE-AK pg 11 (About Similarity) • Unit 10 TE-AK pg 12 (Practice 2) • Unit 10 TE-AK pgs 13-14 + R10-3 (Talking Transformations: Similarity) • Unit 10 TE-AK pg 16 (Practice 3) 			

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.G.5	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.	<p>Included in 1.3, 10.3</p> <ul style="list-style-type: none"> Unit 1 TE-AK pgs 11 #5 + 11b slide 5 (Two Investigations Rolled into One + Lesson Notes) [<i>angle sum</i>] Unit 1 TE-AK pg 13 (Angle Relationships) [<i>exterior angle and parallel lines</i>] Unit 1 TE-AK pg 14 #1-13 (Practice 3) Unit 1 TE-AK pgs 15 + R1-3 (Angle Facts Related to Triangles) Unit 10 TE-AK pg 18 (Angle-Angle Similarity) 			

Cluster: Understand and apply the Pythagorean Theorem.

How does the program address this aspect of the domain?

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.G.6	Explain a proof of the Pythagorean Theorem and its converse.	<p>Included in 2.2</p> <ul style="list-style-type: none"> Unit 2 TE-AK pg 11 (A Famous Theorem) [<i>Pythagorean proof</i>] Unit 2 TE-AK pg 18 (Extend your Thinking: Another Proof) [<i>converse of proof</i>] Unit 10 TE-AK pg 23 (And Finally...A Mathematical Surprise!) [<i>Pythagorean proof</i>] 			
8.G.7	Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.	<p>Included in 2.2, 9.1, 9.3, 10.1, 10.2, 10.3</p> <ul style="list-style-type: none"> Unit 2 TE-AK pg 12 (Practice 4) Unit 2 TE-AK pg 17 (The Club and the Box) Unit 9 TE-AK pgs 20-21 (Swimming at the River) 			

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.G.8	Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.	Included in 2.2 <ul style="list-style-type: none"> Unit 2 TE-AK pg 14 (Finding Distances) Unit 9 TE-AK pg 13 #5 (About Reflections) 			

Cluster: Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.

How does the program address this aspect of the domain?

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.G.9	Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.	Included in 1.1, 1.2 <ul style="list-style-type: none"> Unit 1 TE-AK pgs 3 +3ab (Volume of a Cylinder + Lesson Notes) Unit 1 TE-AK pgs 8 + 8a (Volume of a Cone and a Sphere + Lesson Notes) Unit 1 TE-AK pg 9 (Ice Cream Cones) 			

Domain: Statistics and Probability

Cluster: Investigate patterns of association in bivariate data.

How does the program address this aspect of the domain?

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.SP.1	Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.	Included in 6.1, 6.2 <ul style="list-style-type: none"> Unit 6 TE-AK pgs 4 + 4a (Linear Association + Lesson Notes) Unit 6 TE-AK pg 5 (Practice 1) Unit 6 TE-AK pgs 6 + 6a (Association and Causation + Lesson Notes) Unit 6 TE-AK pg 7 #2 (Practice 2) [<i>clustering</i>] Unit 6 TE-AK pgs 16-17 (Outliers) Unit 6 TE-AK pgs 18-19 (Nonlinear Associations) 			

Standard	Standard Language	Publisher/Developer Citations	Met Yes	Met No	Reviewer Notes
8.SP.2	Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.	<p>Included in 6.2</p> <ul style="list-style-type: none"> • Unit 6 TE-AK pgs 10 + 10a (Education Data Revisited + Lesson Notes) • Unit 6 TE-AK pg 13 (Practice 3) • Unit 6 TE-AK pg 14 (Practice 4) • Unit 6 TE-AK pg 15 (Obesity Rates by State) 			
8.SP.3	Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept.	<p>Included in 6.2</p> <ul style="list-style-type: none"> • Unit 6 TE-AK pgs 11-12 (Analyzing Education Data) • Unit 6 TE-AK pg 13 (Practice 3) • Unit 6 TE-AK pg 15 (Obesity Rates by State) 			
8.SP.4	Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables.	<p>Included in 6.3</p> <ul style="list-style-type: none"> • Unit 6 TE-AK pgs 22 + 22ab (Two-Way Tables + Lesson Notes) • Unit 6 TE-AK pgs 23-24 (Practice 5) • Unit 6 TE-AK pg 25 (A Marketing Decision) 			

Appendix: (Publisher/Developer, please enter any additional notes regarding the standards below.)

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