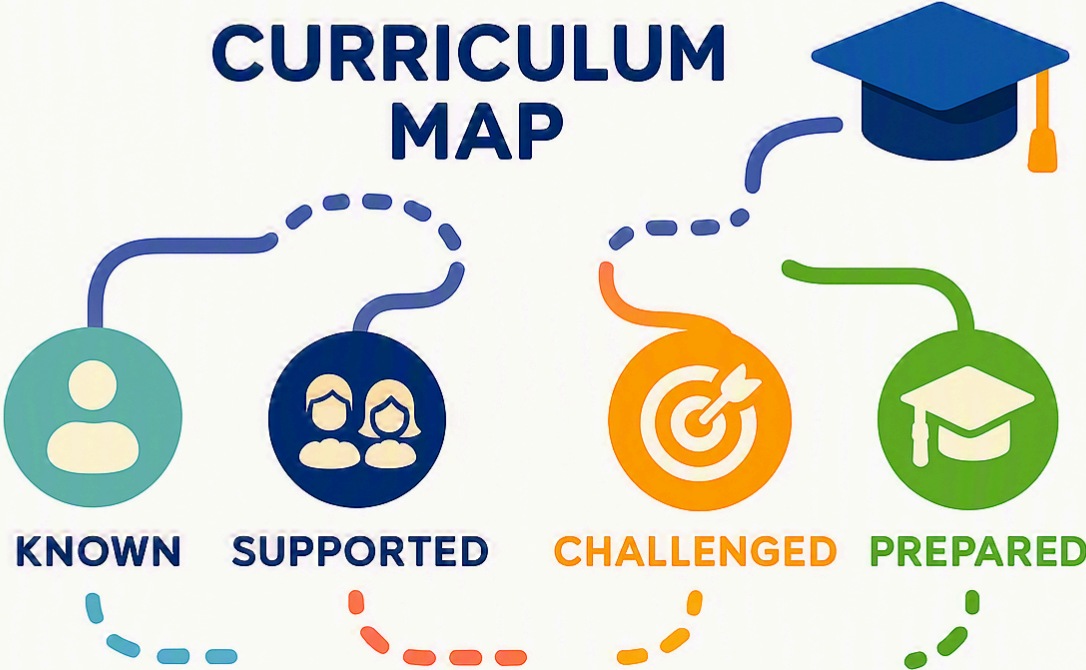


Every student in BISD will be known,
supported, challenged, and prepared.



Quarter 1 <i>August 12, 2026 - October 8, 2026</i>	
Learning Objective <i>The student will...</i>	TEKS
- Explain the relationship between the circumference and diameter of a circle. - Use the circumference formula to find the circumference, diameter, or radius - Apply the circumference formulas to determine the circumference, radius, or diameter of a circle and justify their mathematical reasoning.	7.5B Describe π as the ratio of the circumference of a circle to its diameter
Explain how the formula for the area of a circle is developed and use it to determine the area of a circle given its radius	7.8C Use models to determine the approximate formulas for the circumference and area of a circle and connect the models to the actual formulas
- Determine the circumference and area of circles and interpret solutions in real-world contexts. - Solve composite figure problems by applying circumference and area formulas in sequence. - Apply concepts of circumference and area to solve problems independently.	7.9B Determine the circumference and area of circles
Determine the area of composite figures containing circles by subtracting the area of one figure from another.	7.9C Determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles
Write equations from real-world scenarios and write real-world scenarios from equations	7.10A Write one-variable, two-step equations and inequalities to represent constraints or conditions within problems. 7.10C Write a corresponding real-world problem given a one-variable, two-step equation or inequality.

Write an equation or inequality to represent a word problem and write a word problem to represent a given equation or inequality.	8.8A Write one-variable equations or inequalities with variables on both sides that represent problems using rational number coefficients and constants 8.8B 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.
Model and solve one-variable, two-step equations.	7.11A Model and solve one-variable, two-step equations and inequalities
Write, model, and solve one-variable equations that represent mathematical and real-world problems.	8.8A Write one-variable equations or inequalities with variables on both sides that represent problems using rational number coefficients and constants 8.8B 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 8.8C 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
Model and solve one-variable equations with variables on both sides of the equal sign.	8.8A Write one-variable equations or inequalities with variables on both sides that represent problems using rational number coefficients and constants 8.8C 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
Solve one-variable equations with variables on both sides of the equal sign using rational numbers.	8.8A Write one-variable equations or inequalities with variables on both sides that represent problems using rational number coefficients and constants 8.8C 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.
Explain the advantages and disadvantages of different payment methods and analyze situations of being financially responsible and irresponsible.	7.3B Apply and extend previous understandings of operations to solve problems using addition, subtraction, multiplication, and division of rational numbers 8.12E Identify and explain the advantages and disadvantages of different payment methods 8.12F Analyze situations to determine if they represent financially responsible decisions and identify the benefits of financial responsibility and the costs of financial irresponsibility
Calculate the total cost of repaying a loan and compare how interest rate and loan length affect the cost of credit.	7.3B Apply and extend previous understandings of operations to solve problems using addition, subtraction, multiplication, and division of rational numbers 8.12A Solve real-world problems comparing how interest rate and loan length affect the cost of credit 8.12B 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 on-line calculator
Solve one-variable equations with variables on both sides of the equal sign using rational numbers.	8.8A Write one-variable equations or inequalities with variables on both sides that represent problems using rational number coefficients and constants
Calculate and compare simple interest earnings.	8.12D Calculate and compare simple interest and compound interest earnings
Calculate and compare compound interest earnings.	8.12D Calculate and compare simple interest and compound interest earnings.
Calculate and compare simple and compound interest earnings.	8.12D Calculate and compare simple interest and compound interest

	earnings
Explain how small investments grow over time and compare simple and compound interest earnings.	8.12C Explain how small amounts of money invested regularly, including money saved for college and retirement, grow over time 8.12D Calculate and compare simple interest and compound interest earnings
Estimate the cost of college and develop a savings plan to prepare for these costs.	8.12G Estimate the cost of a two-year and four-year college education, including family contribution, and devise a periodic savings plan for accumulating the money needed to contribute to the total cost of attendance for at least the first year of college 8.12D Calculate and compare simple interest and compound interest earnings
Solve problems using the angle sum theorem of triangles.	8.8D Use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles 7.11C Write and solve equations using geometry concepts, including the sum of the angles in a triangle, and angle relationships
Solve problems using the exterior angle theorem of triangles.	8.8D Use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles
Solve problems using the angle sum and exterior angle theorem of triangles.	8.8D Use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles 7.11C Write and solve equations using geometry concepts, including the sum of the angles in a triangle, and angle relationships

Establish facts about the angles created when parallel lines are cut by a transversal.	8.8D Use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles
Calculate the measures of angles created when parallel lines are cut by a transversal.	8.8D Use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles
Determine if triangles are similar using angle measures and solve problems.	8.8D Use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles
Solve problems using the angle sum and exterior angle theorem of triangles, parallel lines cut by a transversal, and similar triangles.	8.8D Use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles
Use models to explain the Pythagorean theorem.	8.6C Use models and diagrams to explain the Pythagorean theorem
Use the Pythagorean theorem to solve problems. (hypotenuse)	8.7C Use the Pythagorean theorem and its converse to solve problems
Use the Pythagorean theorem to solve problems. (leg)	8.7C Use the Pythagorean theorem and its converse to solve problems
Use the Pythagorean theorem and its converse to solve problems.	8.7C Use the Pythagorean theorem and its converse to solve problems
Determine the distance between points on a coordinate	8.7D Determine the distance between two points on a coordinate plane

plane using the Pythagorean theorem.	using the Pythagorean theorem
Use models to explain the Pythagorean theorem and use the Pythagorean theorem to solve problems and determine the distance between points on a coordinate plane.	8.6C Use models and diagrams to explain the Pythagorean theorem 8.7C Use the Pythagorean theorem and its converse to solve problems 8.7D Determine the distance between two points on a coordinate plane using the Pythagorean theorem

Quarter 2 <i>October 14, 2026 - December 18, 2026</i>	
Learning Objective <i>The student will...</i>	TEKS
Use formulas to determine solutions for the surface area of rectangular prisms.	7.9B Determine the circumference and area of circles 8.7B 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
Solve problems involving the surface area of rectangular prisms.	8.7B 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
Use formulas to determine solutions for the surface area of triangular prisms.	7.9D 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 8.7B 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

Solve problems involving the surface area of triangular prisms.	8.7B 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
- Use formulas to determine solutions for the surface area of rectangular and triangular prisms.	7.9D 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 8.7B 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
Solve problems involving the circumference and area of a circle	7.9B Determine the circumference and area of circles
Use formulas to determine solutions for the surface area of cylinders.	8.7B 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
Explain the volume formula of a cylinder and explain the relationship between the volume of a cylinder and cone with the same base and height.	8.6A Describe the volume formula $V = Bh$ of a cylinder in terms of its base area and its height 8.6B 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.
Use the formulas for the volume of a cylinder to solve problems.	8.7A Solve problems involving the volume of cylinders, cones, and spheres
Solve problems involving the volume of a cylinder.	8.7A Solve problems involving the volume of cylinders, cones, and spheres

Use the formulas for the volume of a cone to solve problems.	8.7A Solve problems involving the volume of cylinders, cones, and spheres
Solve problems involving the volume of a cone.	8.7A Solve problems involving the volume of cylinders, cones, and spheres
Use the formula for the volume of a sphere to solve problems.	8.7A Solve problems involving the volume of cylinders, cones, and spheres
Solve problems involving the volume of cylinders, cones, and spheres.	8.7A Solve problems involving the volume of cylinders, cones, and spheres
Explain the properties of translations on a coordinate plane.	8.10A Generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane
Use an algebraic rule to describe translations on the coordinate plane.	8.10A Generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane 8.10C 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
Explain the properties of reflections on a coordinate plane.	8.10A Generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane
Use an algebraic rule to describe reflections on the coordinate plane.	8.10A Generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane 8.10C 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

Use an algebraic rule to describe translations and reflections on the coordinate plane.	8.10A Generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane 8.10C 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
Explain the properties of rotations on a coordinate plane.	8.10A Generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane
Use an algebraic rule to describe translations and reflections on the coordinate plane.	8.10C 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
Use an algebraic rule to describe rotations on the coordinate plane.	8.10A Generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane 8.10C 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
Use an algebraic rule to describe translations, reflections, and rotations on the coordinate plane.	8.10A Generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane 8.10C 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
Write numbers in scientific notation and order a set	8.2C Convert between standard decimal notation and scientific

of real numbers in mathematical and real-world contexts.	notation 8.2D Order a set of real numbers arising from mathematical and real-world contexts
Determine solutions for volume of cylinders, cones, and spheres, and determine solutions for surface area of prisms and cylinders.	8.7A Solve problems involving the volume of cylinders, cones, and spheres 8.7B 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
Use models to explain the Pythagorean theorem and use the Pythagorean theorem and its converse to solve problems.	8.6C Use models and diagrams to explain the Pythagorean theorem 8.7C Use the Pythagorean theorem and its converse to solve problems
Solve one-variable equations with variables on both sides of the equal sign, solve problems using angle theorems, and calculate and compare simple and compound interest earnings.	8.8C 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 8.8D Use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles 8.12D Calculate and compare simple interest and compound interest earnings.

Quarter 3 <i>January 5, 2027 - March 19, 2027</i>	
Learning Objective <i>The student will...</i>	TEKS

Order a set of real numbers in mathematical and real-world contexts.	8.2D Order a set of real numbers arising from mathematical and real-world contexts
Solve one-variable equations with variables on both sides of the equal sign using rational numbers.	8.8A Write one-variable equations or inequalities with variables on both sides that represent problems using rational number coefficients and constants 8.8C 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
Solve problems using the angle sum and exterior angle theorem of triangles, parallel lines cut by a transversal, and similar triangles.	8.8D Use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles
Solve one-variable equations with variables on both sides of the equal sign and solve problems using angle theorems.	8.8C 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 8.8D Use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles
Identify the corresponding sides of similar figures to write proportions.	7.5C Solve mathematical and real-world problems involving similar shape and scale drawings 8.3A Generalize that the ratio of corresponding sides of similar shapes are proportional, including a shape and its dilation

Compare dilated shapes and use an algebraic rule to dilate a figure on the coordinate plane.	8.3B Compare and contrast the attributes of a shape and its dilation(s) on a coordinate plane 8.3C 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
Use an algebraic rule to describe dilations and explain how the scale factor can affect the measurements of a dilated figure.	8.3C 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 8.10D Model the effect on linear and area measurements of dilated two-dimensional shapes
- Compare the sides and angles of similar figures to write - Proportions and use an algebraic rule to dilate a figure on the coordinate plane.	8.3A Generalize that the ratio of corresponding sides of similar shapes are proportional, including a shape and its dilation 8.3B Compare and contrast the attributes of a shape and its dilation(s) on a coordinate plane 8.3C 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
Use an algebraic rule to describe dilations and explain how the scale factor can affect the measurements of a dilated figure.	7.5C Solve mathematical and real-world problems involving similar shape and scale drawings 8.3C 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 8.10D Model the effect on linear and area measurements of dilated two-dimensional shapes
Differentiate between transformations that generate congruent figures and those that do not.	8.3C 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 8.10B Differentiate between transformations that preserve congruence and those that do not 8.10C 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
Use an algebraic rule to represent transformations on the coordinate plane.	8.3C 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 8.10C 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
Identify functions using sets of ordered pairs and tables.	8.5G Identify functions using sets of ordered pairs, tables, mappings, and graphs
Identify functions using sets of ordered pairs, mappings, and tables.	
Identify functions using sets of ordered pairs, tables, mappings, and graphs.	
Use similar right triangles to explain that slope is the same for any two points on the same line.	8.4A Use similar right triangles to develop an understanding that slope, m, given as the rate comparing the change in y-values to the change in x-values, $(y_2 - y_1) / (x_2 - x_1)$, is the same for any two points (x_1, y_1) and (x_2, y_2) on the same line

Graph proportional relationships and explain how the unit rate is the same as the slope of the line.	8.4B Graph proportional relationships, interpreting the unit rate as the slope of the line that models the relationship
Represent proportional situations with graphs and equations.	8.5A Represent linear proportional situations with tables, graphs, and equations in the form of $y = kx$
Represent linear proportional situations with tables and equations.	8.5A Represent linear proportional situations with tables, graphs, and equations in the form of $y = kx$
Represent linear proportional situations with tables, graphs, and equations.	8.5A Represent linear proportional situations with tables, graphs, and equations in the form of $y = kx$
Solve problems involving direct variation.	8.5E Solve problems involving direct variation
Determine the rate of change or slope and y-intercept from a table.	8.4C Use data from a table or graph to determine the rate of change or slope and y-intercept in mathematical and real-world problems
Determine the rate of change or slope and y-intercept from a table or graph.	8.4C Use data from a table or graph to determine the rate of change or slope and y-intercept in mathematical and real-world problems
Represent linear non-proportional situations with graphs and equations.	8.5B Represent linear non-proportional situations with tables, graphs, and equations in the form of $y = mx + b$, where $b \neq 0$
Represent proportional and non-proportional situations with tables, graphs, and equations.	8.5A Represent linear proportional situations with tables, graphs, and equations in the form of $y = kx$ 8.5B Represent linear non-proportional situations with tables, graphs, and equations in the form of $y = mx + b$, where $b \neq 0$
Explain the differences between proportional and non-proportional relationships using tables, graphs, and equations.	8.5F Distinguish between proportional and non-proportional situations using tables, graphs, and equations in the form $y = kx$ or $y = mx + b$, where $b \neq 0$

Identify proportional and non-proportional functions when given a real-world problem.	8.5F Distinguish between proportional and non-proportional situations using tables, graphs, and equations in the form $y = kx$ or $y = mx + b$, where $b \neq 0$ 8.5H Identify examples of proportional and non-proportional functions that arise from mathematical and real-world problems
Represent proportional and non-proportional situations with tables, graphs, and equations.	8.5A Represent linear proportional situations with tables, graphs, and equations in the form of $y = kx$ 8.5B Represent linear non-proportional situations with tables, graphs, and equations in the form of $y = mx + b$, where $b \neq 0$
Write an equation from a table of data that represents non proportional situations.	8.5I Write an equation in the form $y = mx + b$ to model a linear relationship between two quantities using verbal, numerical, tabular, and graphical representations
Write an equation from a graph that represents non-proportional situations.	8.5I Write an equation in the form $y = mx + b$ to model a linear relationship between two quantities using verbal, numerical, tabular, and graphical representations
Write an equation from a verbal description that represents non proportional situations.	8.5I Write an equation in the form $y = mx + b$ to model a linear relationship between two quantities using verbal, numerical, tabular, and graphical representations
Identify functions, and write an equation from a table, graph, and verbal description that represents non-proportional situations.	8.4C Use data from a table or graph to determine the rate of change or slope and y-intercept in mathematical and real-world problems 8.5G Identify functions using sets of ordered pairs, tables, mappings, and graphs 8.5I Write an equation in the form $y = mx + b$ to model a linear relationship between two quantities using verbal, numerical, tabular, and graphical representations
Write an equation from a table, graph, and verbal	8.5I Write an equation in the form $y = mx + b$ to model a linear

description that represents non-proportional situations.	relationship between two quantities using verbal, numerical, tabular, and graphical representations
Identify the point where two lines intersect on a graph and verify the values of the point that make both equations true.	8.9A Identify and verify the values of x and y that simultaneously satisfy two linear equations in the form $y = mx + b$ from the intersections of the graphed equations
Write an equation to represent non-proportional situations and identify the point where two lines intersect on a graph and verify the values of the point that make both equations true.	8.5I Write an equation in the form $y = mx + b$ to model a linear relationship between two quantities using verbal, numerical, tabular, and graphical representations 8.9A Identify and verify the values of x and y that simultaneously satisfy two linear equations in the form $y = mx + b$ from the intersections of the graphed equations

Quarter 4 <i>March 22, 2027 - May 27, 2027</i>	
<i>The student will...</i> Learning Objective	TEKS
Represent data on a scatterplot.	8.11A Construct a scatterplot and describe the observed data to address questions of association such as linear, nonlinear, and no association between bivariate data
Describe whether there is a linear, nonlinear, or no association between the data represented on a scatterplot.	8.5C 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 8.11A Construct a scatterplot and describe the observed data to address questions of association such as linear, nonlinear, and no

	association between bivariate data
Use a trend line on a scatterplot to make predictions.	8.5D Use a trend line that approximates the linear relationship between bivariate sets of data to make predictions
Explain ways to select random samples from a larger group of data.	8.11C 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
Use a trend line on a scatterplot to make predictions.	8.5D Use a trend line that approximates the linear relationship between bivariate sets of data to make predictions
Determine the mean from a sample, then use it to calculate the mean absolute deviation.	8.11B 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 8.11C 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
Calculate the mean absolute deviation from a set of no more than 10 numbers.	8.11B 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
Order a set of real numbers arising from mathematical and real world contexts.	8.2D Order a set of real numbers arising from mathematical and real-world contexts
Use an algebraic rule to describe translations, reflections, and rotations on the coordinate plane.	8.10A Generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane 8.10C 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
Determine the ratio of corresponding sides of similar figures, use an algebraic rule to describe dilations and explain how the scale factor can affect the measurements of a dilated figure.	8.3A Generalize that the ratio of corresponding sides of similar shapes are proportional, including a shape and its dilation 8.3C 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 8.10D Model the effect on linear and area measurements of dilated two-dimensional shapes
Solve problems involving the volume of cylinders, cones, and spheres.	8.7A Solve problems involving the volume of cylinders, cones, and spheres
Use the formulas for the volume of cylinders, cones, and spheres to solve problems.	
Use formulas to determine solutions for the surface area of prisms and cylinders.	8.7B 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
Use models to explain the Pythagorean theorem and use the Pythagorean theorem to solve problems and determine the distance between points on a coordinate plane.	8.6C Use models and diagrams to explain the Pythagorean theorem 8.7C Use the Pythagorean theorem and its converse to solve problems 8.7D Determine the distance between two points on a coordinate plane using the Pythagorean theorem
identify functions using sets of ordered pairs, tables, mappings, and graphs.	8.5G Identify functions using sets of ordered pairs, tables, mappings, and graphs
Graph proportional relationships and explain how the unit rate is the same as the slope of the line.	8.4B Graph proportional relationships, interpreting the unit rate as the slope of the line that models the relationship

Use formulas to determine solutions for the surface area of prisms and cylinders.	8.7B 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
Determine the rate of change or slope and y-intercept from a graph.	8.4C Use data from a table or graph to determine the rate of change or slope and y-intercept in mathematical and real-world problems
Write an equation from a table, graph, and verbal description that represents non-proportional situations.	8.5I Write an equation in the form $y = mx + b$ to model a linear relationship between two quantities using verbal, numerical, tabular, and graphical representations
Use a trend line on a scatterplot to make predictions.	8.5D Use a trend line that approximates the linear relationship between bivariate sets of data to make predictions
Calculate and compare simple interest and compound interest.	8.12D Calculate and compare simple interest and compound interest earnings
Write an equation from a table, graph, and verbal description that represents non-proportional situations.	8.4C Use data from a table or graph to determine the rate of change or slope and y-intercept in mathematical and real-world problems 8.5I Write an equation in the form $y = mx + b$ to model a linear relationship between two quantities using verbal, numerical, tabular, and graphical representations
Solve one-variable equations with variables on both sides of the equal sign.	8.8C 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
Describe the relationships between sets and subsets of real numbers and approximate values for irrational numbers on a number line.	8.2A Extend previous knowledge of sets and subsets using a visual representation to describe relationships between sets of real numbers 8.2B Approximate the value of an irrational number, including π and square roots of numbers less than 225, and locate that rational number approximation on a number line

Convert between standard decimal notation and scientific notation.	8.2C Convert between standard decimal notation and scientific notation
Solve one-variable equations with variables on both sides of the equal sign.	8.8C 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
Order a set of real numbers arising from mathematical and real world contexts.	8.2D Order a set of real numbers arising from mathematical and real-world contexts
Compare factors that affect the cost of credit, explain how small investments grow over time, and estimate the cost of college and develop a savings plan for college.	8.12A Solve real-world problems comparing how interest rate and loan length affect the cost of credit 8.12C Explain how small amounts of money invested regularly, including money saved for college and retirement, grow over time 8.12G Estimate the cost of a two-year and four-year college education, including family contribution, and devise a periodic savings plan for accumulating the money needed to contribute to the total cost of attendance for at least the first year of college
Represent linear proportional situations with tables, graphs, and equations, and solve problems involving direct variation.	8.5A Represent linear proportional situations with tables, graphs, and equations in the form of $y = kx$ 8.5E Solve problems involving direct variation
Identify proportional and non-proportional functions when given a real-world problem.	8.5F Distinguish between proportional and non-proportional situations using tables, graphs, and equations in the form $y = kx$ or $y = mx + b$, where $b \neq 0$ 8.5H Identify examples of proportional and non-proportional functions that arise from mathematical and real-world problems
Determine theoretical probabilities for simple events and their complements using sample spaces and describe their relationship.	7.6I Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces 7.6E Find the probabilities of a simple event and its complement and

	describe the relationship between the two
Represent simple events and calculate experimental probabilities from data.	7.6B Select and use different simulations to represent simple and compound events with and without technology 7.6I Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces
Make predictions and solve problems using experimental data and comparisons from simple events.	7.6C make predictions and determine solutions using experimental data for simple and compound events 7.6H solve problems using qualitative and quantitative predictions and comparisons from simple experiment
Determine experimental probability related to compound events using data and sample spaces.	7.6A Represent sample spaces for simple and compound events using lists and tree diagram 7.6I Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces
Determine theoretical probabilities for simple events and their complements using sample spaces and describe their relationship.	7.6I Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces 7.6E Find the probabilities of a simple event and its complement and describe the relationship between the two
Determine experimental probability related to compound events using data and sample spaces.	7.6A Represent sample spaces for simple and compound events using lists and tree diagram 7.6I Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces

Make predictions and solve problems using experimental data and comparisons from compound events.	7.6C make predictions and determine solutions using experimental data for simple and compound events 7.6H solve problems using qualitative and quantitative predictions and comparisons from simple experiment
Represent sample spaces and determine probabilities for simple events and their complements.	7.6A Represent sample spaces for simple and compound events using lists and tree diagram 7.6E Find the probabilities of a simple event and its complement and describe the relationship between the two 7.6I Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces
Determine theoretical probability and represent sample spaces for compound events.	7.6C make predictions and determine solutions using experimental data for simple and compound events 7.6I Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces
Determine the experimental probability of simple and compound events and make predictions using data and sample spaces.	7.6C make predictions and determine solutions using experimental data for simple and compound events 7.6I Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces
Determine the theoretical probability and represent sample spaces for compound events.	7.6C make predictions and determine solutions using experimental data for simple and compound events 7.6I Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces

Determine the theoretical probability and represent sample spaces for compound events.	7.6I Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces
Determine the theoretical probability related to simple and compound events and make predictions.	7.6D Make predictions and determine solutions using theoretical probability for simple and compound events 7.6I Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces
Use experimental data to make predictions and comparisons.	7.6H solve problems using qualitative and quantitative predictions and comparisons from simple experiment
Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces.	7.6I Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces
Represent sample spaces for simple and compound events and determine experimental and theoretical probabilities.	7.6A Represent sample spaces for simple and compound events using lists and tree diagram 7.6E Find the probabilities of a simple event and its complement and describe the relationship between the two 7.6I Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces