TX-Math 7		Scope and Sequence
Unit	**Lesson**	**Objectives**
Number and Operations		
	Rational Numbers	
		Represent positive and negative rational numbers on vertical and horizontal number lines.
		Write a rational number as a decimal that eventually terminates or repeats.
		Describe real-world situations that can be represented by rational numbers, including where opposite quantities combine to make 0.
	Adding and Subtracting Decimals	
		Use visual representations to add and subtract decimals.
		Apply properties of operations to add and subtract decimals.
		Estimate sums and differences of decimals.
		Describe real-world contexts for adding and subtracting decimals.
	Multiplying Decimals	
		Use the rules of signed numbers to multiply decimals.
		Apply properties of operations to multiply decimals.
		Estimate products of decimals.
		Describe real-world contexts for multiplying decimals.
	Dividing Decimals	
		Use the rules of signed numbers to divide decimals.
		Apply properties of operations to divide decimals.
		Estimate quotients of decimals.
		Describe real-world contexts for dividing decimals.
	Solving Problems Involving	

TX-Math 7		Scope and Sequence
Unit	**Lesson**	**Objectives**
	Decimals	
		Solve real-world and mathematical problems involving addition, subtraction, multiplication, and division with decimals.
	Adding and Subtracting Fractions	
		Use visual representations to add and subtract fractions.
		Estimate sums and differences of fractions.
		Describe real-world contexts for adding and subtracting fractions.
	Multiplying Fractions	
		Use the rules of signed numbers and visuals to multiply fractions.
		Apply properties of operations to multiply fractions.
		Estimate products of fractions.
		Describe real-world contexts for multiplying fractions.
	Dividing Fractions	
		Use the rules of signed numbers to divide fractions.
		Apply properties of operations to divide fractions.
		Estimate quotients of fractions.
		Describe real-world contexts for dividing fractions.
	Solving Problems Involving Rational Numbers	
		Solve real-world and mathematical problems involving addition, subtraction, multiplication, and division with rational numbers.
	Understanding Net Worth	
		Differentiate between assets and liabilities.
		Create and interpret a balance sheet.

TX-Math 7		Scope and Sequence
Unit	**Lesson**	**Objectives**
		Calculate net income and net worth.
	Unit Test	
One-Variable Equations and Inequalities: Part One		
	Writing Equations	
		Write equations from words.
		Write equations to represent real-world situations.
	Solving Two-Step Equations	
		Solve two-step equations.
		Solve two-step equations in the real world and interpret the results.
	Equations in the Real World	
		Write and solve equations to represent real-world situations.
	Performance Task: Technology Trends	
	Angle Relationships	
		Identify supplementary, complementary, vertical, and adjacent angles.
		Use special relationships between angle pairs to find an unknown angle measure.
	Finding Unknown Angle Measures	
		Use angle relationships to find unknown measures in a figure.
	Unit Test	
One-Variable Equations and Inequalities: Part Two		
	Constructing Triangles	
		Construct triangles from given parameters.

TX-Math 7		Scope and Sequence
Unit	**Lesson**	**Objectives**
		Identify whether given parameters create a unique triangle, more than one triangle, or no triangle.
	Simple Interest	
		Calculate simple interest, principal, time, and total using the simple interest formula.
		Apply the simple interest formula in the context of a word problem.
	Investing	
		Calculate simple interest and compound interest earnings.
		Apply the rule of 72.
		Compare different investment options for saving money.
	Writing Inequalities	
		Write inequalities from words, and vice-versa.
		Write inequalities to represent real-world situations.
	Solving Two-Step Inequalities	
		Solve two-step inequalities.
		Solve two-step inequalities in the real world and interpret the results.
	Inequalities in the Real World	
		Write, solve, and graph inequalities to represent real-world situations.
	Unit Test	
Proportional Reasoning with Ratios and Rates: Part One		
	Unit Rates	
		Use appropriate language to describe ratios and unit rates.
		Use a given unit rate and proportional reasoning to complete a table.

TX-Math 7		Scope and Sequence
Unit	**Lesson**	**Objectives**
		Use a given unit rate and proportional reasoning to solve problems.
	Finding a Constant of Proportionality	
		Find the constant of proportionality from verbal descriptions, tables, graphs, and diagrams.
	Applications of Unit Rates	
		Determine a unit rate from a real-world context.
		Apply unit rates to solve for an unknown in real-world problems.
		Use unit rates to make comparisons.
	Converting Measurements between Systems	
		Convert measurement units between the customary and metric systems.
	Introduction to Percents	
		Identify an equivalent percent, fraction, or decimal represented in multiple forms.
		Create diagrams to solve for a percent in real-world problems.
		Find the percent of a number using the fraction or decimal equivalent form of a percent to write an expression from a diagram.
	Finding a Percent of a Number	
		Solve problems by finding the percent of a number, including amounts of gratuity and tax, by using diagrams and expressions.
		Find the percent of a number when the percent is more than 100.
	Finding a Total Amount	
		Solve for the total amount in gratuity, tax, or commission problems by using diagrams and expressions, understanding that it is a process of adding to the original amount.
		Find the total amount, including discounts, understanding that it is a process of subtracting from the original amount.

TX-Math 7		Scope and Sequence
Unit	**Lesson**	**Objectives**
	Unit Test	
Proportional Reasoning with Ratios and Rates: Part Two		
	Markups and Markdowns	
		Solve real-world problems involving a markup or markdown relating each as adding or subtracting from the original.
	Finding an Original Amount	
		Find the original amount in real-world percent problems involving gratuity, tax, commission, markup, discount, or markdown using diagrams and expressions.
	Percent Increase and Decrease	
		Find the percent change by using the ratio of the change in quantity to the original amount.
		Use percent increase and decrease to solve real-world problems.
	Applications of Percent	
		Solve multistep percent problems involving tax, gratuity, commission, markup, discount, and markdown.
	Budgeting and Being a Smart Consumer	
		Calculate income tax for earned wages.
		Identify the components of a personal budget, and determine what percentage each category is of the total budget.
		Compare savings from sales, rebates, and coupons.
	Performance Task: Financial Literacy	
	Unit Test	
Cumulative Exam		
	Cumulative Exam Review	
	Cumulative Exam	

TX-Math 7		Scope and Sequence
Unit	**Lesson**	**Objectives**
Graphs and Two-Variable Equations		
	Graphing Proportional Relationships	
		Graph a proportional relationship from tables and verbal descriptions.
		Identify the meanings of points on the graph of a proportional relationship and determine the characteristics of the graph of a proportional relationship.
	Identifying Proportional Relationships	
		Analyze data in tables and graphs to determine if the given relationships are proportional.
	Equations of Proportional Relationships	
		Identify the constant of proportionality from an equation.
		Write an equation to represent a proportional relationship.
		Translate between tables, graphs, and equations to represent proportional relationships.
	Graphing to Analyze Relationships	
		Represent and analyze familiar concepts such as perimeter, circumference, area, volume, and scaling using a coordinate graph.
	Tables, Graphs, and Equations	
		Translate tables and graphs into equations.
		Generate different representations of the same two-variable data.
		Recognize that tabular and graphical representations may be partial representations.
	Unit Test	
Similarity		
	Determining a Scale Factor	

TX-Math 7		Scope and Sequence
Unit	**Lesson**	**Objectives**
		Identify a scale factor from given dimensions and use it to calculate unknown dimensions.
	Solving Scale Problems Using Proportions	
		Use proportional relationships to solve problems involving scale drawings.
	Maps	
		Find actual distances, scale distances, and scale factors in situations involving maps.
	Scale Drawings and Area	
		Compute areas of figures from scale drawings.
	Changing a Scale	
		Solve problems involving reproducing a scale drawing using a different scale.
	Performance Task: Vacation Adventures	
	Unit Test	
Probability		
	Understanding Probability	
		Identify an event with a given probability as impossible, unlikely, likely, or certain.
		Describe the probability of an event as a number between 0 and 1, which represents the likelihood of the event.
		Use the fact that the sum of the probabilities of all possible outcomes is 1 to find the probabilities of complementary events.
	Theoretical Probability	
		Express the theoretical probabilities of given outcomes of an experiment as a ratio.
		Use a given sample space to calculate the theoretical probabilities of events.
		Use theoretical probability to make predictions.
	Experimental Probability	

TX-Math 7		Scope and Sequence
Unit	**Lesson**	**Objectives**
		Find the experimental probability of an event, expressing it as a ratio.
		Use experimental probability to make predictions.
	Experimental vs. Theoretical Probability	
		Compare experimental results to theoretical probabilities and make conjectures about the results.
		Explain possible sources of discrepancy between the theoretical and experimental probability of an event.
	Compound Events and Sample Space	
		Identify the sample space for an experiment involving compound events.
		Determine outcomes in a sample space that represents a given compound event.
	Probability of Compound Events	
		Find probabilities of independent compound events using organized lists, tables, or tree diagrams.
		Find probabilities of dependent compound events using organized lists, tables, or tree diagrams.
	Simulations to Estimate Probabilities	
		Design a simulation to experimentally determine the probability of compound events.
		Use a simulation to generate frequencies for compound events; e.g., use a coin to simulate the gender of a baby and find the experimental probability of having exactly 1 boy in a family of three children.
	Unit Test	
Circles and Composite Figures		
	Circumference	
		Solve problems involving the circumference of a circle.
	Area of a Circle	
		Solve problems involving the area of a circle.

TX-Math 7		Scope and Sequence
Unit	**Lesson**	**Objectives**
		Describe the relationship between the circumference and area of a circle.
	Area of Composite Figures	
		Solve problems involving the area of composite figures.
	Unit Test	
Volume and Surface Area		
	Surface Area of Prisms	
		Calculate surface areas of rectangular and triangular prisms.
	Surface Area of Pyramids	
		Calculate surface area of rectangular and square pyramids.
	Volume of Prisms	
		Calculate volumes of rectangular and triangular prisms.
	Volume of Pyramids	
		Calculate volumes of rectangular and square pyramids.
	Surface Area and Volume of Triangular Pyramids	
		Solve problems involving the volume of triangular pyramids.
		Use a net to calculate the lateral and total surface area of a triangular pyramid.
	Unit Test	
Data Representations		
	Data Representation	
		Interpret different types of data displays.
		Identify an appropriate representation for displaying different data sets.
	Circle Graphs	

TX-Math 7		Scope and Sequence
Unit	**Lesson**	**Objectives**
		Interpret circle graphs.
		Use circle graphs to make predictions.
		Construct a circle graph to display data.
	Inferences and Predictions	
		Make an inference about the whole population based on a sample by using proportional reasoning.
		Examine sample size and the effect on a prediction using the results of a simulation.
	Multiple Samples	
		Use a simulation to generate multiple samples of the same size.
		Compare samples generated from simulations to draw an inference about a population.
	Analyzing Dot Plots	
		Informally compare shapes of two different data distributions with similar variations.
		Analyze two dot plots with similar variation by comparing the measures of center.
	Comparing Box Plots	
		Compare two data sets with different numbers of data points by comparing two box plots.
		Compare two data sets by comparing the difference in the measures of center and the measures of variability.
		Draw an informal comparative inference about two sets of data.
	Comparing Populations	
		Recognize the measure of center and variability to use when making comparisons.
		Draw informal comparative inferences using measures of center and variability.
	Unit Test	
Cumulative Exam		
	Cumulative Exam Review	

TX-Math 7		Scope and Sequence
Unit	**Lesson**	**Objectives**
	Cumulative Exam	