2008-2009
Correlation Documentation

California

Released 8-20-2008

Welcome to OdysseyWare®!

We are excited that you are including OdysseyWare as part of your program of instruction, and we look forward to serving you and your students.

This OdysseyWare Correlation Report provides a quick-reference overview of our course materials, together with corresponding state standards. The report may be helpful in planning instruction using OdysseyWare course materials.

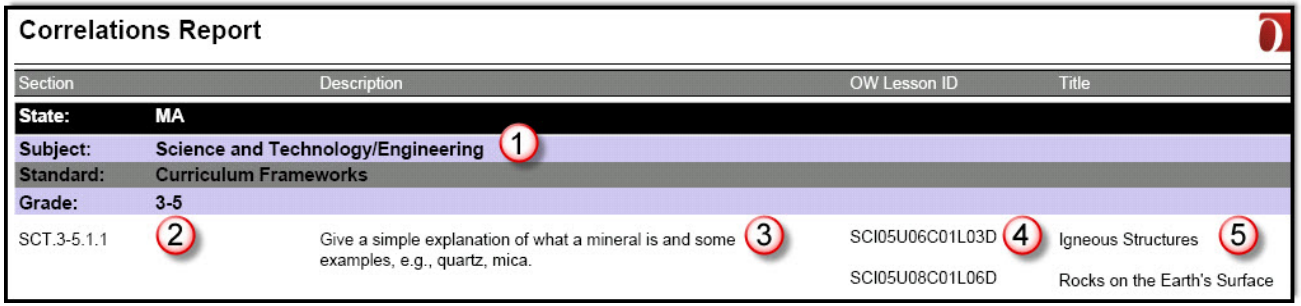
As always, we welcome your feedback.

Thanks for choosing us!

OdysseyWare Curriculum Development Team

Using the Correlation Report

The Correlation Report lists OdysseyWare lessons that target your state standards and has been formatted for ease of use.



Correlations Report

Section	Description	OW Lesson ID	Title
State:	**MA**		
Subject:	**Science and Technology/Engineering** (1)		
Standard:	**Curriculum Frameworks**		
Grade:	**3-5**		
SCT.3-5.1.1 (2)	Give a simple explanation of what a mineral is and some examples, e.g., quartz, mica. (3)	SCI05U06C01L03D (4) SCI05U08C01L06D	Igneous Structures (5) Rocks on the Earth's Surface

1 Displays the state, subject, standard, and grade.

2 Displays the state index code for a particular lesson. Each state assigns its own index code.

3 Displays the actual verbiage from the state standards document

4 Displays the corresponding OdysseyWare lesson identification code. This unique ID number indicates the following:

Subject and Grade	Unit	Chapter	Lesson	Type
SCI05	**U06**	**C01**	**L03**	**D** (default lesson) **A** (alternate assignment)

5 Displays the OdysseyWare lesson title.

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*Please note: Arizona does not observe Daylight Savings Time.

Correlations Report

Section	Description	OW Lesson ID	Title
State:	**CA**		
Subject:	**Mathematics**		
Standard:	**Content Standards for CAPA and Star CAPA Blueprints**		
Grade:	**2-3**		
MA.2-3.AF.3.1.3.1	Select appropriate operational sign to make a number sentence true, using numbers up to 5.	MAT03U03C05L20D	Review: Shapes and Measurement
MA.2-3.AF.3.2.2.1	Extend and recognize an AB pattern by a single attribute.	MAT03U04C03L09D	Number Patterns
MA.2-3.AF.3.2.2.2	Extend and recognize an ABC pattern by a single attribute.	MAT03U04C03L09D	Number Patterns
MA.2-3.NS.2.1.3.1	Compare two sets of objects to determine which is equal by using the equal symbol.	MAT03U03C05L20D	Review: Shapes and Measurement
MA.2-3.NS.2.2.2.1	Find the sum of two whole numbers (limited to single digit numbers and sums up to five).	MAT03U01C01L03D	Single-Digit Addition
		MAT03U01C01L05D	Addition Problems
		MAT03U01C02L10D	Adding Multi-Digit Numbers
		MAT03U01C05L22D	Unit Concept Review (2)
		MAT03U01C05L23D	Practice: Addition and Subtraction
		MAT03U03C02L07D	Checking Addition Problems (1)
		MAT03U03C02L08D	Checking Addition Problems (2)
		MAT03U05C01L02D	Multi-Digit Addition and Subtraction
MA.2-3.NS.2.4.1.1	Recognize 1/2 and one whole using pictures and overlays of familiar objects.	MAT03U03C04L14D	Fractions (1)
MA.2-3.NS.2.4.3.1	Know that when all fractional parts are included, limited to two halves, the result is equal to the whole or to one.	MAT03U02C03L10D	Fractions
		MAT03U03C04L14D	Fractions (1)

Section	Description	OW Lesson ID	Title
		MAT03U03C04L15D	Fractions (2)
		MAT03U08C02L04D	Fractions
MA.2-3.NS.3.1.2.1	Order whole numbers to 5.	MAT03U02C02L05D	Place Value and Number Words
MA.2-3.NS.3.2.1.1	Find the sum of two whole numbers (limited to single digits and sums up to 10).	MAT03U01C01L03D	Single-Digit Addition
		MAT03U01C01L05D	Addition Problems
		MAT03U01C02L10D	Adding Multi-Digit Numbers
		MAT03U01C05L22D	Unit Concept Review (2)
		MAT03U01C05L23D	Practice: Addition and Subtraction
		MAT03U03C01L02D	Column Addition
		MAT03U03C02L07D	Checking Addition Problems (1)
		MAT03U05C01L02D	Multi-Digit Addition and Subtraction
MA.2-3.NS.3.3.1.2	Recognize 1/4.	MAT03U03C04L14D	Fractions (1)
		MAT03U03C04L15D	Fractions (2)
MA.2-3.NS.3.3.3.1	Solve simple one-step problems involving addition of money amounts using either pennies or dollars.	MAT03U01C01L05D	Addition Problems
		MAT03U02C04L14D	Money
		MAT03U04C05L17D	Review: Word Problems and Money
		MAT03U06C03L10D	Money Computation and Roman Numerals
		MAT03U08C02L06D	Money Problems
MA.2-3.SDAP.3.1.3.1	Answer simple questions based on information from a chart, bar graph, or picture graph.	MAT03U08C05L16D	Using Graphs
		MAT03U09C05L17D	Likelihood and Graphs
		MAT03U10C02L06D	Review: Mental Math, Graphs, Likelihood

Section	Description	OW Lesson ID	Title
Standard:	**Content Standards**		
Grade:	**3**		
MA.3.AF.1.3	Select appropriate operational and relational symbols to make an expression true (e.g., if 4 __ 3 = 12, what operational symbol goes in the blank?).	MAT03U03C03L11D	Number Sentences and Symbols
		MAT03U09C01L01D	How Numbers Work
		MAT03U10C05L17D	Review: Number Symbols and Grouping
MA.3.AF.2.2	Extend and recognize a linear pattern by its rules (e.g., the number of legs on a given number of horses may be calculated by counting by 4s or by multiplying the number of horses by 4).	MAT03U04C03L09D	Number Patterns
MA.3.MG.1.1	Choose the appropriate tools and units (metric and U.S.) and estimate and measure the length, liquid volume, and weight/mass of given objects.	MAT03U01C03L13D	Measurement
		MAT03U01C05L22D	Unit Concept Review (2)
		MAT03U03C02L05D	Measurements: Weight and Volume
		MAT03U04C02L06D	Measurement
		MAT03U07C02L05D	Measurement
		MAT03U09C03L12D	Measure: Weight and Volume
		MAT03U10C04L15D	Review: Measurement
MA.3.MG.1.3	Find the perimeter of a polygon with integer sides.	MAT03U06C02L06D	Perimeter and Area
MA.3.MG.2.5	Identify, describe, and classify common three-dimensional geometric objects (e.g., cube, rectangular solid, sphere, prism, pyramid, cone, cylinder).	MAT03U02C04L13D	Shapes
		MAT03U03C05L20D	Review: Shapes and Measurement
		MAT03U08C01L01D	Shapes, Measurement, and Addition
		MAT03U09C04L14D	Symmetry and Shapes
		MAT03U10C04L13D	Review: Shapes and Symmetry

Section	Description	OW Lesson ID	Title
MA.3.MG.2.6	Identify common solid objects that are the components needed to make a more complex solid object.	MAT03U02C04L13D	Shapes
		MAT03U03C05L20D	Review: Shapes and Measurement
		MAT03U08C01L01D	Shapes, Measurement, and Addition
		MAT03U09C04L14D	Symmetry and Shapes
		MAT03U10C04L13D	Review: Shapes and Symmetry
MA.3.MR.2.6	Make precise calculations and check the validity of the results from the context of the problem.	MAT03U03C02L07D	Checking Addition Problems (1)
MA.3.NS.1.1	Count, read, and write whole numbers to 10,000.	MAT03U01C02L09D	Pattern for Expanded Notation
		MAT03U01C05L22D	Unit Concept Review (2)
		MAT03U02C05L19D	Review: Number Order and Place Value
		MAT03U04C01L01D	Numbers to Thousands Place
		MAT03U05C02L05D	Number Patterns Using Place Value
		MAT03U07C01L01D	Review: Place Value
MA.3.NS.1.2	Compare and order whole numbers to 10,000.	MAT03U02C02L05D	Place Value and Number Words
MA.3.NS.1.3	Identify the place value for each digit in numbers to 10,000.	MAT03U01C02L09D	Pattern for Expanded Notation
		MAT03U01C05L22D	Unit Concept Review (2)
		MAT03U02C05L19D	Review: Number Order and Place Value
		MAT03U04C01L01D	Numbers to Thousands Place
		MAT03U05C02L05D	Number Patterns Using Place Value
MA.3.NS.1.5	Use expanded notation to represent numbers (e.g., 3,206 = 3,000 + 200 + 6).	MAT03U01C02L09D	Pattern for Expanded Notation
		MAT03U07C03L09D	Review: Expanded Notation and Roman Numerals
		MAT03U08C03L08D	Expanded Notation and Mixed Numbers

Section	Description	OW Lesson ID	Title
		MAT03U09C01L01D	How Numbers Work
MA.3.NS.2.1	Find the sum or difference of two whole numbers between 0 and 10,000.	MAT03U01C02L10D	Adding Multi-Digit Numbers
		MAT03U01C05L23D	Practice: Addition and Subtraction
		MAT03U03C01L02D	Column Addition
		MAT03U05C01L02D	Multi-Digit Addition and Subtraction
		MAT03U06C01L01D	Multi-Digit Addition
MA.3.NS.2.2	Memorize to automaticity the multiplication table for numbers between 1 and 10.	MAT03U06C04L12D	Multiplication
		MAT03U07C01L03D	Multiplication Facts
		MAT03U07C04L15D	Multiplication Facts
		MAT03U08C04L11D	Multiplication Facts
		MAT03U08C04L12D	Multiple Concept Practice
		MAT03U09C01L04D	Multiplication
		MAT03U10C01L04D	Review: Multiplication Facts
MA.3.NS.2.6	Understand the special properties of 0 and 1 in multiplication and division.	MAT03U06C04L12D	Multiplication
MA.3.NS.2.8	Solve problems that require two or more of the skills mentioned above.	MAT03U09C05L18D	Problem Solving
		MAT03U10C05L19D	Review: Problem Solving
MA.3.NS.3.1	Compare fractions represented by drawings or concrete materials to show equivalency and to add and subtract simple fractions in context (e.g., 1/2 of a pizza is the same amount as 2/4 of another pizza that is the same size; show that 3/8 is larger than 1/4).	MAT03U03C04L14D	Fractions (1)
		MAT03U06C03L09D	Addition and Equivalent Fractions
		MAT03U09C02L06D	Equivalent Fractions
		MAT03U10C03L09D	Review: Fractions and Decimals

Section	Description	OW Lesson ID	Title
MA.3.NS.3.2	Add and subtract simple fractions (e.g., determine that 1/8 + 3/8 is the same as 1/2).	MAT03U04C04L12D	Adding and Subtracting Fractions
		MAT03U06C02L07D	Review: Fractions
MA.3.NS.3.3	Solve problems involving addition, subtraction, multiplication, and division of money amounts in decimal notation and multiply and divide money amounts in decimal notation by using whole-number multipliers and divisors.	MAT03U04C05L17D	Review: Word Problems and Money
		MAT03U06C03L10D	Money Computation and Roman Numerals
		MAT03U08C02L06D	Money Problems
MA.3.SDAP.1.3	Summarize and display the results of probability experiments in a clear and organized way (e.g., use a bar graph or a line plot).	MAT03U08C05L16D	Using Graphs
		MAT03U10C02L06D	Review: Mental Math, Graphs, Likelihood
Grade: 4			
MA.4.AF.1.1	Use letters, boxes, or other symbols to stand for any number in simple expressions or equations (e.g., demonstrate an understanding and the use of the concept of a variable).	MAT04U02C02L07D	Missing Number Equations
MA.4.AF.1.2	Interpret and evaluate mathematical expressions that now use parentheses.	MAT04U09C04L16D	Multiple Concept Review
MA.4.AF.1.3	Use parentheses to indicate which operation to perform first when writing expressions containing more than two terms and different operations.	MAT04U09C04L16D	Multiple Concept Review
MA.4.MG.1.1	Measure the area of rectangular shapes by using appropriate units, such as square centimeter (cm), square meter (m), square kilometer (km), square inch (in), square yard (yd), or square mile (mi).	MAT04U05C03L13D	Perimeter and Area (2)
MA.4.MG.1.2	Recognize that rectangles that have the same area can have	MAT04U05C03L13D	Perimeter and Area (2)

Section	Description	OW Lesson ID	Title
MA.4.MG.1.2	different perimeters.		Perimeter and Area (2)
MA.4.MG.1.3	Understand that rectangles that have the same perimeter can have different areas.	MAT04U05C03L13D	Perimeter and Area (2)
MA.4.MG.1.4	Understand and use formulas to solve problems involving perimeters and areas of rectangles and squares. Use those formulas to find the areas of more complex figures by dividing the figures into basic shapes.	MAT04U05C03L12D	Perimeter and Area (1)
		MAT04U05C03L13D	Perimeter and Area (2)
MA.4.MG.3.5	Know the definitions of a right angle, an acute angle, and an obtuse angle. Understand that 90°, 180°, 270°, and 360° are associated, respectively, with 1/4, 1/2, 3/4, and full turns.	MAT04U04C03L07D	Lines, Segments, End Points, Rays, Angles
MA.4.NS.1.3	Round whole numbers through the millions to the nearest ten, hundred, thousand, ten thousand, or hundred thousand.	MAT04U02C04L16D	Rounding Numbers to 100's
		MAT04U03C01L02D	Rounding Numbers to 10's, 100's, and 1,000's
		MAT04U04C02L04D	Place Value and Rounding
		MAT04U07C03L12D	Review: Rounding Numbers and Place Value
MA.4.NS.1.4	Decide when a rounded solution is called for and explain why such a solution may be appropriate.	MAT04U04C02L04D	Place Value and Rounding
		MAT04U07C03L12D	Review: Rounding Numbers and Place Value
MA.4.NS.1.5	Explain different interpretations of fractions, for example, parts of a whole, parts of a set, and division of whole numbers by whole numbers; explain equivalents of fractions (see Standard 4.0).	MAT04U01C04L16D	Reading and Writing Fractions
		MAT04U02C04L15D	Equivalent Fractions
		MAT04U02C05L20D	Review: Bar Graphs and Fractions
		MAT04U03C02L08D	Fractions Equal to Whole Numbers
		MAT04U03C04L16D	Equivalent Fractions
		MAT04U06C02L09D	Equivalent Fractions

Section	Description	OW Lesson ID	Title
		MAT04U07C02L06D	Fractions (1)
		MAT04U09C01L02D	Equivalent Fractions and Decimals
		MAT04U09C02L06D	Review: Fractions
MA.4.NS.1.7	Write the fraction represented by a drawing of parts of a figure; represent a given fraction by using drawings; and relate a fraction to a simple decimal on a number line.	MAT04U01C04L16D	Reading and Writing Fractions
		MAT04U03C02L08D	Fractions Equal to Whole Numbers
		MAT04U09C02L06D	Review: Fractions
MA.4.NS.1.9	Identify on a number line the relative position of positive fractions, positive mixed numbers, and positive decimals to two decimal places.	MAT04U06C02L08D	Fractions and Mixed Numbers
		MAT04U07C02L06D	Fractions (1)
MA.4.NS.2.1	Estimate and compute the sum or difference of whole numbers and positive decimals to two places.	MAT04U03C02L07D	Rounding and Estimating
		MAT04U03C03L10D	Estimate Answers to 1,000's
		MAT04U04C05L15D	Review: Expanded Notation and Estimation
		MAT04U09C01L03D	Add and Subtract Decimals
MA.4.NS.3.2	Demonstrate an understanding of, and the ability to use, standard algorithms for multiplying a multidigit number by a two-digit number and for dividing a multidigit number by a one-digit number; use relationships between them to simplify computations and to check results.	MAT04U03C01L03D	Multiply with Carrying to 10s
		MAT04U05C01L01D	Introduction to Division
		MAT04U06C04L15D	Equations and Grouping
		MAT04U07C02L08D	Multiplication and Fractions
		MAT04U08C04L13D	Review: Multiplication
		MAT04U09C03L10D	Multiply and Divide
		MAT04U09C03L11D	Multiplication of Whole Numbers

Section	Description	OW Lesson ID	Title
MA.4.NS.3.3	Solve problems involving multiplication of multidigit numbers by two-digit numbers.	MAT04U03C01L03D	Multiply with Carrying to 10s
		MAT04U07C02L08D	Multiplication and Fractions
		MAT04U08C04L13D	Review: Multiplication
		MAT04U09C03L10D	Multiply and Divide
		MAT04U09C03L11D	Multiplication of Whole Numbers
MA.4.NS.4.1	Understand that many whole numbers break down in different ways (e.g., 12 = 4 x 3 = 2 x 6 = 2 x 2 x 3).	MAT04U06C01L01D	Prime and Composite Numbers
		MAT04U06C01L02D	Multiples
		MAT04U06C01L04D	Factors and Multiples
		MAT04U07C01L02D	Factors, Multiples, and Variables
		MAT04U08C01L01D	Factoring and Place Value
MA.4.NS.4.2	Know that numbers such as 2, 3, 5, 7, and 11 do not have any factors except 1 and themselves and that such numbers are called prime numbers.	MAT04U06C01L01D	Prime and Composite Numbers
		MAT04U07C01L02D	Factors, Multiples, and Variables
MA.4.SDAP.1.1	Formulate survey questions; systematically collect and represent data on a number line; and coordinate graphs, tables, and charts.	MAT04U10C01L01D	Data Collection and Random Sampling
		MAT04U10C01P02D	Project: Collecting Data
MA.4.SDAP.1.2	Identify the mode(s) for sets of categorical data and the mode(s), median, and any apparent outliers for numerical data sets.	MAT04U07C01L04D	Averages and Number Rules
Standard:	**Content Standards for CAPA and Star CAPA Blueprints**		
Grade:	**4-5**		
MA.4-5.MG.4.3.1.1	Identify lines that are parallel.	MAT05U04C01L01D	Lines
		MAT05U06C03L09D	Review

Section	Description	OW Lesson ID	Title
		MAT05U10C03L08D	Practice: Lines, Angles, Shapes, and Ratios
MA.4-5.MG.4.3.3.1	Identify congruent shapes.	MAT05U04C01L03D	Figures
MA.4-5.MG.5.2.1.1	Identify common geometric shapes (rectangles, diamonds, octagons, and stars).	MAT04U04C01L01D	Plane and Solid Shapes
		MAT04U07C04L15D	Review: Shapes, Perimeter, and Area
		MAT04U10C04L12D	Shapes
		MAT05U02C03L10D	Shapes
		MAT05U02C03L11D	Solids
MA.4-5.NS.4.1.1.3	Identify the ones and tens place value of a whole number up to 15.	MAT04U01C01L01D	Place Value to 1,000's (1)
		MAT04U01C01L06D	Place Value to 1,000's (2)
		MAT04U02C02L05D	Place Value to 10,000's
		MAT04U03C01L01D	Place Value
		MAT04U04C05L16D	Review: Fractions and Place Value
		MAT04U05C01L04D	Review: Time and Number Sense
		MAT05U01C01L01D	Operations
		MAT05U01C01L02D	Place Value and Large Numbers
		MAT05U10C03L09D	Review: Place Value
MA.4-5.NS.4.1.2.1	Order whole numbers to 10.	MAT05U01C04L13D	Comparing Numbers (1)
MA.4-5.NS.4.1.2.2	Compare whole numbers using the > and = symbols.	MAT05U01C04L13D	Comparing Numbers (1)
MA.4-5.NS.4.1.7.1	Identify the fraction represented by a drawing of parts of a figure (1/2 and 1/4).	MAT04U01C04L16D	Reading and Writing Fractions
		MAT04U03C02L08D	Fractions Equal to Whole Numbers
		MAT04U07C02L06D	Fractions (1)

Section	Description	OW Lesson ID	Title
		MAT04U09C02L06D	Review: Fractions
		MAT05U01C02L04D	Fractions
MA.4-5.NS.4.2.1.1	Using a calculator, determine the sum of whole numbers up to 20.	MAT05U08C01L01D	Whole Numbers and Your Calculator
		MAT05U08C01L02D	Multiplication with Your Calculator
MA.4-5.NS.5.2.1.1	Add whole numbers with sums up to 50 and subtract single digit numbers.	MAT04U01C01L02D	Single-Digit Addition
		MAT04U01C01L03D	Single-Digit Subtraction
MA.4-5.SDAP.4.1.1.1	Represent data in a graph, table, or chart.	MAT05U10C02L04D	Graphs
Standard:	**Content Standards**		
Grade:	**5**		
MA.5.AF.1.5	Solve problems involving linear functions with integer values; write the equation; and graph the resulting ordered pairs of integers on a grid.	MAT05U09C03L09D	Coordinate Graphs
MA.5.MG.1.1	Derive and use the formula for the area of a triangle and of a parallelogram by comparing it with the formula for the area of a rectangle (i.e., two of the same triangles make a parallelogram with twice the area; a parallelogram is compared with a rectangle of the same area by cutting and pasting a right triangle on the parallelogram).	MAT05U03C05L17D	Area of Polygons
		MAT05U07C03L15D	Review: Formulas
MA.5.MG.1.4	Differentiate between, and use appropriate units of measures for, two- and three-dimensional objects (i.e., find the perimeter, area, volume).	MAT05U03C05L15D	Perimeter of Polygons
		MAT05U03C05L16D	Area of Squares and Rectangles
		MAT05U03C05L17D	Area of Polygons
		MAT05U10C03L08D	Practice: Lines, Angles, Shapes, and Ratios

Section	Description	OW Lesson ID	Title
MA.5.MG.2.1	Measure, identify, and draw angles, perpendicular and parallel lines, rectangles, and triangles by using appropriate tools (e.g., straightedge, ruler, compass, protractor, drawing software).	MAT05U04C01L02D	Protractor Measurement
MA.5.MR.2.1	Use estimation to verify the reasonableness of calculated results.	MAT05U01C05L19D	Estimation
		MAT05U03C03L08D	Estimation
MA.5.MR.2.3	Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning.	MAT05U10C02L04D	Graphs
MA.5.NS.1.1	Estimate, round, and manipulate very large (e.g., millions) and very small (e.g., thousandths) numbers.	MAT05U01C05L19D	Estimation
		MAT05U08C01L03D	Division with Your Calculator
		MAT05U08C02L09D	Review: Estimation and Rounding
MA.5.NS.1.2	Interpret percents as a part of a hundred; find decimal and percent equivalents for common fractions and explain why they represent the same value; compute a given percent of a whole number.	MAT05U04C02L09D	Writing Decimals Two Ways
		MAT05U09C04L12D	Converting Fractions and Decimals
		MAT05U09C04L13D	Fractions to Decimals to Percents
MA.5.NS.1.4	Determine the prime factors of all numbers through 50 and write the numbers as the product of their prime factors by using exponents to show multiples of a factor (e.g., 24 = 2 x 2 x 2 x 3 = 2 x 3).	MAT05U08C03L11D	Factor Boxes
		MAT05U08C03L12D	Prime Factors
		MAT05U10C03L07D	Review: Factors, Rounding, and Averages
MA.5.NS.1.5	Identify and represent on a number line decimals, fractions, mixed numbers, and positive and negative integers.	MAT05U02C01L05D	Fractions

Section	Description	OW Lesson ID	Title
MA.5.NS.2.1	Add, subtract, multiply, and divide with decimals; add with negative integers; subtract positive integers from negative integers; and verify the reasonableness of the results.	MAT05U06C04L13D	Adding Decimals
		MAT05U06C04L14D	Adding Decimals in Columns
		MAT05U06C04L15D	Subtracting Decimals
		MAT05U06C05L16D	Multiplication of Decimals
		MAT05U07C05L19D	Multiplying Decimal Numbers
		MAT05U08C01L04D	Add and Subtract Decimals with Your Calculator
		MAT05U08C01L05D	Multiply and Divide Decimals with Your Calculator
		MAT05U09C02L06D	Division of Decimals
		MAT05U09C02L07D	Place Value and Remainders
		MAT05U09C05L16D	Adding and Subtracting Mixed Numbers and Decimals
		MAT05U09C05L17D	Multiplying and Dividing Fractions and Decimals
MA.5.NS.2.2	Demonstrate proficiency with division, including division with positive decimals and long division with multidigit divisors.	MAT05U02C01L02D	Division Problems
		MAT05U03C01L01D	Introduction to Short Division
		MAT05U04C03L15D	Multiplication and Short Division
		MAT05U05C05L16D	Long and Short Division (1)
		MAT05U05C05L17D	Long and Short Division (2)
		MAT05U06C03L11D	Dividing Whole Numbers
		MAT05U08C01L05D	Multiply and Divide Decimals with Your Calculator
		MAT05U09C02L06D	Division of Decimals
		MAT05U09C02L07D	Place Value and Remainders
		MAT05U09C05L17D	Multiplying and Dividing Fractions and Decimals
		MAT05U10C04L14D	Review: Division of Whole Numbers
MA.5.NS.2.3	Solve simple problems, including ones arising in concrete situations, involving the addition and subtraction of fractions and mixed numbers (like and unlike denominators of 20 or	MAT05U01C02L06D	Operations with Fractions

Section	Description	OW Lesson ID	Title
MA.5.NS.2.3	less), and express answers in the simplest form.		Operations with Fractions
		MAT05U02C02L06D	Simplifying a Fraction
		MAT05U02C02L07D	Add and Subtract Fractions
		MAT05U02C02L08D	Subtract Mixed Numbers
		MAT05U03C02L05D	Adding and Subtracting with Unlike Denominators (1)
		MAT05U03C02L06D	Adding and Subtracting with Unlike Denominators (2)
		MAT05U05C03L09D	Review (1)
		MAT05U05C03L10D	Review (2)
		MAT05U05C04L13D	Subtracting Mixed Numbers (1)
		MAT05U05C04L14D	Subtracting Mixed Numbers (2)
		MAT05U07C02L06D	Reducing Fractions
		MAT05U07C02L08D	Adding and Subtracting Mixed Numbers with Like Denominators
		MAT05U07C02L10D	Subtracting by Finding Common Denominators
		MAT05U07C02L11D	Adding and Subtracting Mixed Numbers with Unlike Denominators
		MAT05U07C04L17D	Multiplying Fractions with Whole Numbers
		MAT05U08C04L16D	Multiplication of Fractions with Fractions
		MAT05U09C05L16D	Adding and Subtracting Mixed Numbers and Decimals
MA.5.NS.2.4	Understand the concept of multiplication and division of fractions.	MAT05U06C01L01D	Multiplication of Fractions
		MAT05U06C01L02D	Simplifying Multiplication of Fractions
		MAT05U07C04L17D	Multiplying Fractions with Whole Numbers
		MAT05U08C04L16D	Multiplication of Fractions with Fractions
		MAT05U09C01L02D	Reciprocals and Dividing Fractions
		MAT05U09C01L03D	Dividing Fractions with Whole Numbers
		MAT05U09C05L17D	Multiplying and Dividing Fractions and Decimals
MA.5.NS.2.5	Compute and perform simple multiplication and division of	MAT05U06C01L01D	Multiplication of Fractions

Section	Description	OW Lesson ID	Title
MA.5.NS.2.5	fractions and apply these procedures to solving problems.		Multiplication of Fractions
		MAT05U06C01L02D	Simplifying Multiplication of Fractions
		MAT05U07C04L17D	Multiplying Fractions with Whole Numbers
		MAT05U08C04L16D	Multiplication of Fractions with Fractions
		MAT05U09C01L02D	Reciprocals and Dividing Fractions
		MAT05U09C01L03D	Dividing Fractions with Whole Numbers
		MAT05U09C05L17D	Multiplying and Dividing Fractions and Decimals
MA.5.SDAP.1.1	Know the concepts of mean, median, and mode; compute and compare simple examples to show that they may differ.	MAT05U03C03L09D	Averaging Numbers
		MAT05U10C03L07D	Review: Factors, Rounding, and Averages
MA.5.SDAP.1.2	Organize and display single-variable data in appropriate graphs and representations (e.g., histogram, circle graphs) and explain which types of graphs are appropriate for various data sets.	MAT05U10C02L04D	Graphs
		MAT05U10C02L05D	Problems Using Graphs
MA.5.SDAP.1.3	Use fractions and percentages to compare data sets of different sizes.	MAT05U06C02L05D	Place Value Words
MA.5.SDAP.1.5	Know how to write ordered pairs correctly; for example, (x, y).	MAT05U09C03L09D	Coordinate Graphs
Grade: 6			
MA.6.AF.1.3	Apply algebraic order of operations and the commutative, associative, and distributive properties to evaluate expressions; and justify each step in the process.	MAT06U03C03L12D	Properties of Addition and Multiplication
MA.6.AF.1.4	Solve problems manually by using the correct order of operations or by using a scientific calculator.	MAT06U03C03L09D	Calculator Practice: Basic Operations (1)
		MAT06U03C03L10D	Calculator Practice: Basic Operations (2)

Section	Description	OW Lesson ID	Title
MA.6.AF.2.1	Convert one unit of measurement to another (e.g., from feet to miles, from centimeters to inches).	MAT06U08C04L17D	The Metric System
		MAT06U08C04L18D	Customary Units of Measure
MA.6.AF.3.1	Use variables in expressions describing geometric quantities (e.g., P = 2w + 2l, A = 1/2 bh, C = pi d - the formulas for the perimeter of a rectangle, the area of a triangle, and the circumference of a circle, respectively).	MAT06U08C01L04D	Circles
		MAT06U08C03L13D	Perimeter, Area, and Volume (2)
		MAT06U08C03L14D	Review of Formulas
		MAT06U08C03L15D	Practice: Perimeter, Circumference, Area, and Volume
MA.6.MG.1.2	Know common estimates of pi (3.14; 22/7) and use these values to estimate and calculate the circumference and the area of circles; compare with actual measurements.	MAT06U08C01L04D	Circles
MA.6.MG.1.3	Know and use the formulas for the volume of triangular prisms and cylinders (area of base x height); compare these formulas and explain the similarity between them and the formula for the volume of a rectangular solid.	MAT06U08C01L04D	Circles
MA.6.MG.2.3	Draw quadrilaterals and triangles from given information about them (e.g., a quadrilateral having equal sides but no right angles, a right isosceles triangle).	MAT06U08C01L01D	Two- and Three- Dimensional Shapes
MA.6.NS.1.1	Compare and order positive and negative fractions, decimals, and mixed numbers and place them on a number line.	MAT06U04C01L04D	Comparing Decimal Numbers
		MAT06U05C02L08D	Comparing Fractions
MA.6.NS.1.2	Interpret and use ratios in different contexts (e.g., batting averages, miles per hour) to show the relative sizes of two quantities, using appropriate notations (a/b, a to b, a:b).	MAT06U09C01L03D	Ratios and Division of Decimals
MA.6.NS.1.4	Calculate given percentages of quantities and solve problems involving discounts at sales, interest earned, and	MAT06U07C01L04D	Equations Using Percents

Section	Description	OW Lesson ID	Title
MA.6.NS.1.4	tips.		Equations Using Percents
MA.6.NS.2.1	Solve problems involving addition, subtraction, multiplication, and division of positive fractions and explain why a particular operation was used for a given situation.	MAT06U06C01L01D	Multiplying Fractions
		MAT06U06C02L07D	Dividing Fractions
		MAT06U06C02L08D	Dividing Fractions and Whole Numbers
		MAT06U06C03L12D	Review: Dividing Fractions and Whole and Mixed Numbers (1)
		MAT06U06C03L13D	Review: Dividing Fractions and Whole and Mixed Numbers (2)
		MAT06U07C03L10D	Practice Adding Fractions
		MAT06U07C03L11D	Practice Subtracting Fractions
MA.6.NS.2.2	Explain the meaning of multiplication and division of positive fractions and perform the calculations (e.g., 5/8 ÷ 15/16 = 5/8 x 16/15 = 2/3).	MAT06U06C01L01D	Multiplying Fractions
		MAT06U06C02L07D	Dividing Fractions
		MAT06U06C02L08D	Dividing Fractions and Whole Numbers
		MAT06U06C03L12D	Review: Dividing Fractions and Whole and Mixed Numbers (1)
		MAT06U06C03L13D	Review: Dividing Fractions and Whole and Mixed Numbers (2)
MA.6.NS.2.4	Determine the least common multiple and the greatest common divisor of whole numbers; use them to solve problems with fractions (e.g., to find a common denominator to add two fractions or to find the reduced form for a fraction).	MAT06U02C03L11D	Factors, Multiples, and Whole Number Multiplication
		MAT06U05C03L11D	Prime Factors and Least Common Multiple
		MAT06U05C03L12D	Least Common Multiples and Greatest Common Factors
		MAT06U06C01L01D	Multiplying Fractions
		MAT06U06C01L02D	Multiplying Fractions with Reducing
		MAT06U06C01L03D	Multiplying Fractions and Whole Numbers
		MAT06U07C02L08D	Greatest Common Factor and Least Common

Section	Description	OW Lesson ID	Title
			Multiple
MA.6.SDAP.1.1	Compute the range, mean, median, and mode of data sets.	MAT06U09C03L08D	Mean, Median, and Mode
		MAT06U09C03L09D	Statistics: Averaging
		MAT06U09C03L10D	Averages, Equalities, and Inequalities
		MAT06U10C02L05D	Fractions, Averages, and Graphs
MA.6.SDAP.1.4	Know why a specific measure of central tendency (mean, median, mode) provides the most useful information in a given context.	MAT06U09C03L08D	Mean, Median, and Mode
		MAT06U09C03L09D	Statistics: Averaging
		MAT06U09C03L10D	Averages, Equalities, and Inequalities
		MAT06U10C02L05D	Fractions, Averages, and Graphs
MA.6.SDAP.2.5	Identify claims based on statistical data and, in simple cases, evaluate the validity of the claims.	MAT06U09C01L01D	Prediction and Probability
MA.6.SDAP.3.3	Represent probabilities as ratios, proportions, decimals between 0 and 1, and percentages between 0 and 100 and verify that the probabilities computed are reasonable; know that if P is the probability of an event, 1 - P is the probability of an event not occurring.	MAT06U09C01L01D	Prediction and Probability
		MAT06U09C01L02D	Ratios
Standard:	**Content Standards for CAPA and Star CAPA Blueprints**		
Grade:	**6-8**		
MA.6-8.AF.6.2.1.1	Convert one unit of measurement to another (e.g., foot to inches, feet to yard).	MAT08U06C01L04D	Types of Quadrilaterals
		MAT08U06C02L06D	Rectangular Solids
MA.6-8.MG.3.1.1 .1	Choose the appropriate tool to measure volume.	MAT06U08C03L12D	Perimeter, Area, and Volume (1)

Section	Description	OW Lesson ID	Title
		MAT08U06C01L01D	Area, Perimeter, and Square Roots
MA.6-8.NS.3.1.4.1	Round off prices to the nearest dollar.	MAT07U03C02L06D	Rounding Numbers (2)
MA.6-8.NS.4.3.1.1	Using a calculator, solve addition problems with sums up to 75.	MAT06U03C03L09D	Calculator Practice: Basic Operations (1)
		MAT06U03C03L10D	Calculator Practice: Basic Operations (2)
		MAT07U04C02L12D	Calculators and Prime Numbers
		MAT07U05C04L15D	Decimals with a Calculator
		MAT08U03C03L15D	Calculator Exercises
		MAT08U07C02L13D	Integers and Exponents
MA.6-8.NS.6.1.1.1	Order and compare numbers up to 75.	IMA01U01C01L01D	Classifying and Comparing Numbers
		MAT07U03C01L01D	Number Order
		MAT07U10C01L01D	Place Value, Order, and Rounding
MA.6-8.NS.6.2.1.1	Using a calculator, solve addition and subtraction problems with sums up to 75.	MAT06U03C03L09D	Calculator Practice: Basic Operations (1)
		MAT06U03C03L10D	Calculator Practice: Basic Operations (2)
		MAT07U04C02L12D	Calculators and Prime Numbers
		MAT07U05C04L15D	Decimals with a Calculator
		MAT08U03C03L15D	Calculator Exercises
		MAT08U07C02L13D	Integers and Exponents
MA.6-8.NS.6.2.3.1	Using a calculator, solve real-life addition and subtraction problems with sums up to 30.	MAT06U03C03L09D	Calculator Practice: Basic Operations (1)
		MAT06U03C03L10D	Calculator Practice: Basic Operations (2)
		MAT07U04C02L12D	Calculators and Prime Numbers
		MAT07U05C04L15D	Decimals with a Calculator
		MAT08U03C03L15D	Calculator Exercises

Section	Description	OW Lesson ID	Title
		MAT08U07C02L13D	Integers and Exponents
Standard:	**Content Standards**		
Grade:	**7**		
MA.7.AF.1.1	Use variables and appropriate operations to write an expression, an equation, an inequality, or a system of equations or inequalities that represents a verbal description (e.g., three less than a number, half as large as area A).	MAT07U03C01L03D	Number Patterns and Ordered Pairs
		MAT07U09C01L01D	Solving for Unknown Variables
MA.7.AF.1.3	Simplify numerical expressions by applying properties of rational numbers (e.g., identity, inverse, distributive, associative, commutative) and justify the process used.	MAT07U04C01L02D	The Distributive Property
MA.7.AF.1.4	Use algebraic terminology (e.g., variable, equation, term, coefficient, inequality, expression, constant) correctly.	MAT07U03C01L03D	Number Patterns and Ordered Pairs
		MAT07U09C01L01D	Solving for Unknown Variables
MA.7.AF.2.1	Interpret positive whole-number powers as repeated multiplication and negative whole-number powers as repeated division or multiplication by the multiplicative inverse. Simplify and evaluate expressions that include exponents.	MAT07U01C02L12D	Decimal Number System
MA.7.AF.3.4	Plot the values of quantities whose ratios are always the same (e.g., cost to the number of an item, feet to inches, circumference to diameter of a circle). Fit a line to the plot and understand that the slope of the line equals the quantities.	MAT07U07C04L10D	Circles
		MAT07U10C02L05D	Geometric Properties
MA.7.AF.4.1	Solve two-step linear equations and inequalities in one variable over the rational numbers, interpret the solution or solutions in the context from which they arose, and verify the reasonableness of the results.	MAT07U06C01L06D	Problem Solving: Multiplication, Division, and Reasonable Answers

Section	Description	OW Lesson ID	Title
MA.7.AF.4.2	Solve multistep problems involving rate, average speed, distance, and time or a direct variation.	MAT07U10C04L13D	Formula Review
MA.7.MG.1.1	Compare weights, capacities, geometric measures, times, and temperatures within and between measurement systems (e.g., miles per hour and feet per second, cubic inches to cubic centimeters).	MAT07U04C02L11D	Multiplying and Dividing Weights and Measures
		MAT07U05C04L13D	Metric Measurement
		MAT07U07C02L05D	Perimeter and Area of Triangles
		MAT07U10C02L05D	Geometric Properties
MA.7.MG.1.2	Construct and read drawings and models made to scale.	MAT07U07C05L15D	Similar Figures and Scale Drawings
MA.7.MG.1.3	Use measures expressed as rates (e.g., speed, density) and measures expressed as products (e.g., person-days) to solve problems; check the units of the solutions; and use dimensional analysis to check the reasonableness of the answer.	MAT07U06C01L06D	Problem Solving: Multiplication, Division, and Reasonable Answers
MA.7.MG.2.1	Use formulas routinely for finding the perimeter and area of basic two-dimensional figures and the surface area and volume of basic three-dimensional figures, including rectangles, parallelograms, trapezoids, squares, triangles, circles, prisms, and cylinders.	MAT07U07C03L07D	Perimeter and Area of Squares and Rectangles
		MAT07U07C03L08D	Parallelograms, Trapezoids, and Formulas
		MAT07U07C04L10D	Circles
		MAT07U07C04L11D	Hexagons
		MAT07U09C01L02D	Formulas: From Interest to Miles per Gallon
		MAT07U10C02L05D	Geometric Properties
		MAT07U10C04L13D	Formula Review
MA.7.MG.2.2	Estimate and compute the area of more complex or irregular two- and three-dimensional figures by breaking the figures	MAT07U07C03L07D	Perimeter and Area of Squares and Rectangles

Section	Description	OW Lesson ID	Title
MA.7.MG.2.2	down into more basic geometric objects.		Perimeter and Area of Squares and Rectangles
		MAT07U07C03L08D	Parallelograms, Trapezoids, and Formulas
		MAT07U07C04L11D	Hexagons
		MAT07U10C02L05D	Geometric Properties
MA.7.MG.2.3	Compute the length of the perimeter, the surface area of the faces, and the volume of a three-dimensional object built from rectangular solids. Understand that when the lengths of all dimensions are multiplied by a scale factor, the surface area is multiplied by the square of the scale factor and the volume is multiplied by the cube of the scale factor.	MAT07U07C02L05D	Perimeter and Area of Triangles
		MAT07U10C02L05D	Geometric Properties
MA.7.MG.2.4	Relate the changes in measurement with a change of scale to the units used (e.g., square inches, cubic feet) and to conversions between units (1 square foot = 144 square inches or [1 ft] = [144 in], 1 cubic inch is approximately 16.38 cubic centimeters or [1 in] = [16.38 cm]).	MAT07U04C02L10D	Customary Units of Measure
		MAT07U04C02L11D	Multiplying and Dividing Weights and Measures
MA.7.MG.3.1	Identify and construct basic elements of geometric figures (e.g., altitudes, mid-points, diagonals, angle bisectors, and perpendicular bisectors; central angles, radii, diameters, and chords of circles) by using a compass and straightedge.	MAT07U07C01L01D	Introduction to Lines, and Angles
		MAT07U07C04L10D	Circles
MA.7.MG.3.3	Know and understand the Pythagorean theorem and its converse and use it to find the length of the missing side of a right triangle and the lengths of other line segments and, in some situations, empirically verify the Pythagorean theorem by direct measurement.	MAT07U07C02L04D	Triangle Terms
MA.7.MG.3.6	Identify elements of three-dimensional geometric objects (e.g., diagonals of rectangular solids) and describe how two or more objects are related in space (e.g., skew lines, the possible ways three planes might intersect).	MAT07U07C01L01D	Introduction to Lines, and Angles

Section	Description	OW Lesson ID	Title
MA.7.MR.2.1	Use estimation to verify the reasonableness of calculated results.	MAT07U06C01L06D	Problem Solving: Multiplication, Division, and Reasonable Answers
MA.7.MR.2.6	Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.	MAT07U06C01L06D	Problem Solving: Multiplication, Division, and Reasonable Answers
MA.7.MR.3.1	Evaluate the reasonableness of the solution in the context of the original situation.	MAT07U06C01L06D	Problem Solving: Multiplication, Division, and Reasonable Answers
MA.7.NS.1.2	Add, subtract, multiply, and divide rational numbers (integers, fractions, and terminating decimals) and take positive rational numbers to whole-number powers.	MAT07U05C04L14D	Terminating and Repeating Decimals
MA.7.NS.1.3	Convert fractions to decimals and percents and use these representations in estimations, computations, and applications.	MAT07U05C03L09D	Fractions as Decimals
		MAT07U05C03L10D	Decimals, Fractions, and Percents
		MAT07U06C02L08D	Converting Fractions to Decimals
MA.7.NS.1.5	Know that every rational number is either a terminating or repeating decimal and be able to convert terminating decimals into reduced fractions.	MAT07U05C03L09D	Fractions as Decimals
		MAT07U05C03L10D	Decimals, Fractions, and Percents
		MAT07U05C04L14D	Terminating and Repeating Decimals
MA.7.NS.1.6	Calculate the percentage of increases and decreases of a quantity.	MAT07U06C03L13D	Solving for Percentages
		MAT07U06C03L14D	Solving for Percentages: Rate and Base
		MAT07U10C03L10D	Base, Rate, and Percentage
		MAT07U10C03L11D	Percentages and Averages
MA.7.NS.1.7	Solve problems that involve discounts, markups, commissions, and profit and compute simple and compound	MAT07U05C04L16D	Uses of Percents

Section	Description	OW Lesson ID	Title
MA.7.NS.1.7	interest.		Uses of Percents
		MAT07U06C03L13D	Solving for Percentages
		MAT07U06C03L14D	Solving for Percentages: Rate and Base
		MAT07U09C01L02D	Formulas: From Interest to Miles per Gallon
		MAT07U10C03L10D	Base, Rate, and Percentage
		MAT07U10C03L11D	Percentages and Averages
MA.7.SDAP.1.3	Understand the meaning of, and be able to compute, the minimum, the lower quartile, the median, the upper quartile, and the maximum of a data set.	MAT07U08C02L04D	Measures of Central Tendency: Mode and Median
		MAT07U10C01L02D	Central Tendency, Ratios, and Proportions
		MAT07U10C04L16D	Different Types of Statistics
Grade: 8-12			
MA.8-12.AI.10.0	Students add, subtract, multiply, and divide monomials and polynomials. Students solve multistep problems, including word problems, by using these techniques.	ALG01U06C01L01D	Add and Subtract Polynomials
		ALG01U06C01L02D	Grouping Symbols
		ALG01U06C02L04D	Multiplying by a Monomial
		ALG01U06C02L05D	Multiplying all Polynomials
		ALG01U06C02L07D	Dividing by a Monomial
		ALG01U06C02L08D	Long Division
		ALG02U04C01L01D	Products and Factoring
		ALG02U04C01L02D	Multiplying Polynomials by Polynomials
		ALG02U04C02L09D	Addition and Subtraction Operations
		ALG02U04C02L10D	Division with Polynomials
		ALG02U04C02L11D	Synthetic Division
		ESSMAU03C01L04D	Add and Subtract Polynomials
		ESSMAU03C01L05D	Multiply and Divide Polynomials
		ESSMAU05C01L06D	Solving Problems

Section	Description	OW Lesson ID	Title
		IMA01U01C02L08D	Commutative and Associative Properties
		IMA01U01C02L09D	The Distributive Property
		IMA01U01C02L10D	Simplifying Expressions
		MAT08U08C01L06D	Multiplying Binomials
		MAT08U08C03L16D	Problem Solving (1)
		MAT08U08C03L17D	Problem Solving (2)
		MAT08U10C02L14D	Applications
MA.8-12.AI.1.1	Students use properties of numbers to demonstrate whether assertions are true or false.	ALG01U01C02L05D	Classifying and Comparing Numbers
		ALG02U06C01L01D	Real Numbers
		ALG02U10C01L01D	Integers
		ALG02U10C01L02D	Integers Continued
		ALG02U10C02L13D	Real Numbers
		ALG02U10C02L14D	Real Numbers Continued
		CMAU01C01L02D	Number Skills
		CMAU01C01L03D	Signed Numbers and Measurement Scales
		GEOU01C04L11D	Review of Algebraic Postulates
		MAT08U02C04L26D	Exploring Different Kinds of Numbers
MA.8-12.AI.11.0	Students apply basic factoring techniques to second- and simple third-degree polynomials. These techniques include finding a common factor for all terms in a polynomial, recognizing the difference of two squares, and recognizing perfect squares of binomials.	ALG01U06C02L06D	F.O.I.L. and Special Cases
		ALG01U06C03L10D	Greatest Common Factor
		ALG01U06C03L11D	Factoring Out the GCF
		ALG01U06C03L13D	Factoring Trinomials: Part 1
		ALG01U06C03L14D	Factoring Trinomials: Part 2
		ALG01U06C03L15D	Special Cases
		ALG01U06C03L16D	Complete Factorization

Section	Description	OW Lesson ID	Title
		ALG02U04C02L10D	Division with Polynomials
		ALG02U05C01L02D	Reducing Rational Expressions
MA.8-12.AI.12.0	Students simplify fractions with polynomials in the numerator and denominator by factoring both and reducing them to the lowest terms.	ALG01U06C03L10D	Greatest Common Factor
		ALG01U06C03L13D	Factoring Trinomials: Part 1
		ALG01U06C03L14D	Factoring Trinomials: Part 2
		ALG01U06C03L15D	Special Cases
		ALG01U06C03L16D	Complete Factorization
		ALG02U04C02L10D	Division with Polynomials
		ALG02U05C03L11D	Fractional Equations
		ESSMAU03C01L04D	Add and Subtract Polynomials
		ESSMAU03C01L05D	Multiply and Divide Polynomials
MA.8-12.AI.13.0	Students add, subtract, multiply, and divide rational expressions and functions. Students solve both computationally and conceptually challenging problems by using these techniques.	ALG01U09C01L02D	Multiply and Divide Rational Expressions
		ALG01U09C01L03D	Add and Subtract with Like Denominators
		ALG01U09C01L04D	Add and Subtract with Unlike Denominators
MA.8-12.AI.14.0	Students solve a quadratic equation by factoring or completing the square.	ALG01U08C03L10D	Solving by Factoring
		ALG01U08C03L13A	Completing the Square
		ALG01U08C03L13D	Completing the Square
		ALG02U05C02L07D	Addition and Subtraction
		ALG02U06C02L06D	Quadratic Equations
		ALG02U06C02L07D	Factoring Quadratic Equations
		ALG02U06C02L08D	Completing the Square
		ALG02U06C03L12D	Sum and Product of Roots

Section	Description	OW Lesson ID	Title
MA.8-12.AI.15.0	Students apply algebraic techniques to solve rate problems, work problems, and percent mixture problems.	ALG01U09C02L10D	Applications of Rational Equations
		ALG02U02C03L15D	Miscellaneous Problems
		ALG02U07C03L15D	Applications Continued
		ALG02U07C03L16D	Applications Continued Again
		CMAU09C01L02D	Food Services
		ESSMAU04C01L03D	Measures of Rates and Products
		ESSMAU05C01L06D	Solving Problems
		ESSMAU06C03L12D	Multi-Step Word Problems (Rate)
MA.8-12.AI.16.0	Students understand the concepts of a relation and a function, determine whether a given relation defines a function, and give pertinent information about given relations and functions.	MAT08U09C02L08D	Number Patterns and Functions
		PRCU01C01L01D	Ordered-Pair Numbers: Relations
		PRCU10C04L11D	Review Mathematics 1201 and 1202
		PRCU10C04L12D	Review Mathematics 1203 and 1204
MA.8-12.AI.17.0	Students determine the domain of independent variables and the range of dependent variables defined by a graph, a set of ordered pairs, or a symbolic expression.	ALG01U03C01L02D	Identifying Functions
		ALG01U03C01L04D	Modeling Functions
		ALG02U01C02L06D	Relations and Functions: Definitions
		ALG02U01C02L07D	Relations and Functions: Graphs
		ALG02U01C02L08D	Relations and Functions: Function Notation
		ALG02U03C01L01D	Line Graphs
		CMAU07C03L11D	Graphs, Functions, Slope
		ESSMAU02C02L07D	Independent and Dependent Variables
		MAT08U09C02L08D	Number Patterns and Functions
		MAT08U10C01L01D	Integers, Absolute Value, and Cartesian Planes
		PRCU01C01L01D	Ordered-Pair Numbers: Relations

Section	Description	OW Lesson ID	Title
		PRCU01C02L05D	Algebra of Functions: Notation
		PRCU04C03L05D	Graphs of Sin and Cos
		PRCU04C04L07D	Other Graphs
MA.8-12.AI.18.0	Students determine whether a relation defined by a graph, a set of ordered pairs, or a symbolic expression is a function and justify the conclusion.	ALG01U03C01L02D	Identifying Functions
		ALG01U03C01L04D	Modeling Functions
		ALG02U01C02L07D	Relations and Functions: Graphs
		ALG02U01C02L08D	Relations and Functions: Function Notation
		ALG02U03C01L01D	Line Graphs
		MAT08U09C02L08D	Number Patterns and Functions
		MAT08U10C01L01D	Integers, Absolute Value, and Cartesian Planes
		PRCU01C01L01D	Ordered-Pair Numbers: Relations
		PRCU04C03L05D	Graphs of Sin and Cos
		PRCU04C04L07D	Other Graphs
		PRCU10C04L11D	Review Mathematics 1201 and 1202
MA.8-12.AI.19.0	Students know the quadratic formula and are familiar with its proof by completing the square.	ALG01U08C03L13A	Completing the Square
		ALG01U08C03L13D	Completing the Square
		ALG01U08C03L14D	Quadratic Formula: Part 1
		ALG01U08C03L15D	Quadratic Formula: Part 2
		ALG02U06C02L06D	Quadratic Equations
		ALG02U06C02L08D	Completing the Square
		ALG02U06C03L10D	Quadratic Formula
		ALG02U06C03L11D	Word Problems Using the Quadratic Formula
		ALG02U06C03L12D	Sum and Product of Roots
		ALG02U10C02L13D	Real Numbers
		ALG02U10C02L14D	Real Numbers Continued

Section	Description	OW Lesson ID	Title
MA.8-12.AI.2.0	Students understand and use such operations as taking the opposite, finding the reciprocal, taking a root, and raising to a fractional power. They understand and use the rules of exponents.	ALG01U07C02L05D	Multiplication
		ALG01U07C02L06D	Raising to a Power
		ALG01U07C02L07D	Division
		ALG02U01C03L13D	Multiplication and Division Part 1
		ALG02U01C03L14D	Multiplication and Division Part 2
		ALG02U01C03L15D	Exponents of Exponential Expressions
		ALG02U04C01L01D	Products and Factoring
		ALG02U05C01L01D	Multiplying and Dividing with Fractions
		ALG02U08C01L01D	Exponential Functions
		ALG02U08C01L02D	Fractional Exponents
		ALG02U10C01L01D	Integers
		ALG02U10C01L02D	Integers Continued
		ESSMAU01C03L09D	Using Exponent Rules
		ESSMAU01C03L11D	Negative Whole-Number Exponents
		ESSMAU03C01L02D	Working with Exponents and Roots
		ESSMAU03C02L07D	Inverse Operations
		MAT08U01C02L06D	Base Ten and Exponential Form
		MAT08U02C01L04D	Squares and Square Roots
		MAT08U05C01L08D	Review: Factors, Multiples, and Rational Numbers
		MAT08U07C02L13D	Integers and Exponents
		MAT08U10C01L06D	Expressions, Variables, and Exponents (1)
		MAT08U10C01L07D	Expressions, Variables, and Exponents (2)
MA.8-12.AI.20.0	Students use the quadratic formula to find the roots of a second-degree polynomial and to solve quadratic equations.	ALG01U08C02L05D	Quadratic Functions
		ALG01U08C03L14D	Quadratic Formula: Part 1
		ALG01U08C03L15D	Quadratic Formula: Part 2

Section	Description	OW Lesson ID	Title
		ALG02U06C02L06D	Quadratic Equations
		ALG02U06C03L10D	Quadratic Formula
		ALG02U06C03L11D	Word Problems Using the Quadratic Formula
		ALG02U06C03L12D	Sum and Product of Roots
		ALG02U10C02L13D	Real Numbers
		ALG02U10C02L14D	Real Numbers Continued
		PRCU10C04L14D	Review Mathematics 1207 and 1208
MA.8-12.AI.21.0	Students graph quadratic functions and know that their roots are the x-intercepts.	ALG01U03C01L02D	Identifying Functions
		ALG01U03C01L04D	Modeling Functions
		ALG01U08C02L05D	Quadratic Functions
		ALG02U01C02L07D	Relations and Functions: Graphs
		ALG02U01C02L08D	Relations and Functions: Function Notation
		ALG02U03C01L01D	Line Graphs
		PRCU01C01L03D	Ordered-Pair Numbers: Rules of Corres.
		PRCU02C02L04D	2nd-Degree Functions: Solutions
		PRCU04C03L05D	Graphs of Sin and Cos
		PRCU04C04L07D	Other Graphs
MA.8-12.AI.22.0	Students use the quadratic formula or factoring techniques or both to determine whether the graph of a quadratic function will intersect the x-axis in zero, one, or two points.	ALG01U08C03L10D	Solving by Factoring
		ALG01U08C03L14D	Quadratic Formula: Part 1
		ALG01U08C03L15D	Quadratic Formula: Part 2
		ALG02U05C02L07D	Addition and Subtraction
		ALG02U06C02L07D	Factoring Quadratic Equations
		ALG02U06C03L10D	Quadratic Formula
		ALG02U06C03L11D	Word Problems Using the Quadratic Formula
		ALG02U06C03L12D	Sum and Product of Roots

Section	Description	OW Lesson ID	Title
		ALG02U10C02L13D	Real Numbers
		ALG02U10C02L14D	Real Numbers Continued
MA.8-12.AI.23.0	Students apply quadratic equations to physical problems, such as the motion of an object under the force of gravity.	ALG01U08C02L05D	Quadratic Functions
		ALG02U02C03L15D	Miscellaneous Problems
		ALG02U06C02L06D	Quadratic Equations
		ALG02U07C03L15D	Applications Continued
		ALG02U07C03L16D	Applications Continued Again
		ESSMAU05C01L06D	Solving Problems
		PRCU10C04L14D	Review Mathematics 1207 and 1208
MA.8-12.AI.24.1	Students explain the difference between inductive and deductive reasoning and identify and provide examples of each.	ESSMAU05C01L05D	Inductive and Deductive Reasoning
		GEOU02C02L08D	Inductive Reasoning
		GEOU02C02L09D	Deductive Reasoning
		GEOU02C02L10D	Using Deductive Reasoning
		IMA01U01C03L12D	Drawing Conclusions
MA.8-12.AI.24.2	Students identify the hypothesis and conclusion in logical deduction.	ESSMAU05C01L02D	Making Conjectures
		ESSMAU05C01L05D	Inductive and Deductive Reasoning
MA.8-12.AI.24.3	Students use counterexamples to show that an assertion is false and recognize that a single counterexample is sufficient to refute an assertion.	IMA01U01C03L12D	Drawing Conclusions
MA.8-12.AI.25.1	Students use properties of numbers to construct simple, valid arguments (direct and indirect) for, or formulate counterexamples to, claimed assertions.	GEOU10C01L02D	Geometry Proofs
		IMA01U01C03L12D	Drawing Conclusions

Section	Description	OW Lesson ID	Title
MA.8-12.AI.25.2	Students judge the validity of an argument according to whether the properties of the real number system and the order of operations have been applied correctly at each step.	ALG01U01C01L02D	Exponents and Order of Operations
		ALG02U01C02L05D	Structure: Applications
		ESSMAU03C01L01D	Order of Operations
		MAT08U02C01L04D	Squares and Square Roots
		MAT08U05C01L01D	Review of Basic Number Theory
MA.8-12.AI.25.3	Given a specific algebraic statement involving linear, quadratic, or absolute value expressions or equations or inequalities, students determine whether the statement is true sometimes, always, or never.	ALG01U01C01L03D	Evaluating Expressions
		ALG01U02C03L13D	More Than Two Unknowns
		ALG01U04C01L02D	Addition Property of Inequality
		ALG01U04C01L03D	Multiplication Property of Inequality
		ALG01U04C01L05D	Problem Solving
		ALG01U04C02L09D	Inequalities in Two Variables
		ALG01U04C03L11D	Absolute Value Solution Sets
		ALG01U04C03L12D	Absolute Value Inequalities in One Variable
		ALG01U04C03L13D	Absolute Value Inequalities in Two Variables
		ALG01U07C01L02D	Exponential Expressions
		ALG01U08C02L05D	Quadratic Functions
		ALG01U08C02L08D	Quadratic Inequalities
		ALG02U02C02L04D	Solving Equations
		ALG02U02C02L09D	Solving Inequalities
		ALG02U02C02L10D	Graphing Solution Sets for Inequalities
		ALG02U02C02L11D	Compound Sentences
		ALG02U03C03L16D	Solving Inequalities
		ALG02U06C02L06D	Quadratic Equations
		ALG02U10C01L03D	Open Sentences
		ALG02U10C01L04D	Open Sentences Continued

Section	Description	OW Lesson ID	Title
		ESSMAU03C01L01D	Order of Operations
		ESSMAU03C02L07D	Inverse Operations
		ESSMAU06C01L05D	Solutions of Linear Equations
		ESSMAU06C01L06D	Graphing Higher Power Functions
		ESSMAU06C02L08D	Solving Absolute Value Inequalities
		ESSMAU06C02L09D	Solving Linear Equations
		ESSMAU06C02L10D	Solving Linear Inequalities
		ESSMAU06C03L12D	Multi-Step Word Problems (Rate)
		ESSMAU06C03L13D	Multi-Step Word Problems (Work)
		ESSMAU06C03L16D	System of Linear Inequalities
		MAT08U10C01L05D	Algebraic Expressions and Variables
		MAT08U10C01L06D	Expressions, Variables, and Exponents (1)
		MAT08U10C01L07D	Expressions, Variables, and Exponents (2)
		PRCU02C02L06D	Quadratic Inequalities
		PRCU10C04L14D	Review Mathematics 1207 and 1208
MA.8-12.AI.3.0	Students solve equations and inequalities involving absolute values.	ALG01U04C03L11D	Absolute Value Solution Sets
		ALG01U04C03L12D	Absolute Value Inequalities in One Variable
		ALG01U04C03L13D	Absolute Value Inequalities in Two Variables
		ALG02U02C02L11D	Compound Sentences
		ALG02U10C01L03D	Open Sentences
		ALG02U10C01L04D	Open Sentences Continued
		ESSMAU06C02L08D	Solving Absolute Value Inequalities
MA.8-12.AI.4.0	Students simplify expressions before solving linear equations and inequalities in one variable, such as 3(2x - 5) + 4(x - 2) = 12.	ALG01U01C03L14D	Simplifying Expressions
		ALG01U03C03L11D	Linear Equations
		ALG01U07C01L01D	Negative Exponents

Section	Description	OW Lesson ID	Title
		ALG01U09C01L01D	Simplifying Rational Expressions
		ALG01U09C01L04D	Add and Subtract with Unlike Denominators
		ALG02U02C02L04D	Solving Equations
		ALG02U03C03L16D	Solving Inequalities
		ESSMAU03C01L01D	Order of Operations
		ESSMAU03C01L04D	Add and Subtract Polynomials
		ESSMAU06C01L05D	Solutions of Linear Equations
		ESSMAU06C01L06D	Graphing Higher Power Functions
		ESSMAU06C02L09D	Solving Linear Equations
		ESSMAU06C02L10D	Solving Linear Inequalities
		ESSMAU06C03L12D	Multi-Step Word Problems (Rate)
		ESSMAU06C03L13D	Multi-Step Word Problems (Work)
		ESSMAU06C03L16D	System of Linear Inequalities
		MAT08U10C01L05D	Algebraic Expressions and Variables
		MAT08U10C01L06D	Expressions, Variables, and Exponents (1)
		MAT08U10C01L07D	Expressions, Variables, and Exponents (2)
		PRCU05C03L05D	Quotient Relations
MA.8-12.AI.5.0	Students solve multistep problems, including word problems, involving linear equations and linear inequalities in one variable and provide justification for each step.	ALG02U02C02L04D	Solving Equations
		ALG02U03C03L16D	Solving Inequalities
		ESSMAU05C01L06D	Solving Problems
		ESSMAU06C01L05D	Solutions of Linear Equations
		ESSMAU06C01L06D	Graphing Higher Power Functions
		ESSMAU06C02L09D	Solving Linear Equations
		ESSMAU06C02L10D	Solving Linear Inequalities
		ESSMAU06C03L12D	Multi-Step Word Problems (Rate)
		ESSMAU06C03L13D	Multi-Step Word Problems (Work)
		ESSMAU06C03L16D	System of Linear Inequalities

Section	Description	OW Lesson ID	Title
		MAT08U08C03L16D	Problem Solving (1)
		MAT08U08C03L17D	Problem Solving (2)
		MAT08U10C02L14D	Applications
MA.8-12.AI.6.0	Students graph a linear equation and compute the x-and y-intercepts (e.g., graph 2x + 6y = 4). They are also able to sketch the region defined by linear inequality (e.g., they sketch the region defined by 2x + 6y < 4).	ALG01U03C03L11D	Linear Equations
		ALG01U04C01L02D	Addition Property of Inequality
		ALG01U04C01L03D	Multiplication Property of Inequality
		ALG01U04C02L07D	Compound Inequality Graphs
		ALG01U04C02L09D	Inequalities in Two Variables
		ALG02U02C02L10D	Graphing Solution Sets for Inequalities
		ALG02U10C01L05D	Graphs
		ALG02U10C01L06D	Graphs Continued
		CMAU07C03L11D	Graphs, Functions, Slope
MA.8-12.AI.7.0	Students verify that a point lies on a line, given an equation of the line. Students are able to derive linear equations by using the point-slope formula.	ALG01U03C02L09D	Slope
		ALG01U03C03L11D	Linear Equations
		ALG01U03C04L17D	Writing Linear Equations (3)
		ALG02U02C02L04D	Solving Equations
		ALG02U03C01L05D	Equations: Point Slope Part 1
		ALG02U03C01L06D	Equations: Point Slope Part 2
		ALG02U03C01L07D	Equations: Point Slope Part 3
		ESSMAU06C01L03D	Graphing Linear Functions
		ESSMAU06C01L05D	Solutions of Linear Equations
		ESSMAU06C01L06D	Graphing Higher Power Functions
		ESSMAU06C03L12D	Multi-Step Word Problems (Rate)
		ESSMAU06C03L13D	Multi-Step Word Problems (Work)

Section	Description	OW Lesson ID	Title
		MAT08U09C02L09D	Coordinate Graphs
		PRCU10C03L08A	Slope of a Line
MA.8-12.AI.8.0	Students understand the concepts of parallel lines and perpendicular lines and how those slopes are related. Students are able to find the equation of a line perpendicular to a given line that passes through a given point.	ALG02U03C01L09D	General Equation of a Line
		ESSMAU06C01L04D	Parallel Lines
		GEOU08C03L09D	Slope
MA.8-12.AI.9.0	Students solve a system of two linear equations in two variables algebraically and are able to interpret the answer graphically. Students are able to solve a system of two linear inequalities in two variables and to sketch the solution sets.	ALG01U04C01L01D	Graphing
		ALG01U04C01L02D	Addition Property of Inequality
		ALG01U04C01L03D	Multiplication Property of Inequality
		ALG01U04C01L05D	Problem Solving
		ALG01U04C02L07D	Compound Inequality Graphs
		ALG01U04C02L09D	Inequalities in Two Variables
		ALG01U05C01L02D	Graphing Systems of Equations
		ALG01U05C01L03D	Systems of Inequalities
		ALG01U05C02L06D	Addition Method
		ALG01U05C02L08D	Fractional Coefficients
		ALG01U05C03L10D	Using Two Variables
		ALG02U02C02L09D	Solving Inequalities
		ALG02U02C02L10D	Graphing Solution Sets for Inequalities
		ALG02U03C02L11D	Solutions for Systems of Equations
		ALG02U03C02L12D	Solutions by Addition
		ALG02U03C02L14D	Application of Systems of Equations
		ALG02U03C03L16D	Solving Inequalities
		ALG02U07C03L12D	Systems of Equations

Section	Description	OW Lesson ID	Title
		ALG02U07C03L13D	Systems of Inequalities
		ALG02U10C01L05D	Graphs
		ALG02U10C01L06D	Graphs Continued
		ESSMAU06C03L15D	System of Equations
		ESSMAU06C03L16D	System of Linear Inequalities
MA.8-12.AII.1.0	Students solve equations and inequalities involving absolute value.	ALG01U04C01L02D	Addition Property of Inequality
		ALG01U04C01L03D	Multiplication Property of Inequality
		ALG01U04C01L05D	Problem Solving
		ALG01U04C02L09D	Inequalities in Two Variables
		ALG01U04C03L11D	Absolute Value Solution Sets
		ALG01U04C03L12D	Absolute Value Inequalities in One Variable
		ALG01U04C03L13D	Absolute Value Inequalities in Two Variables
		ALG02U02C02L09D	Solving Inequalities
		ALG02U02C02L10D	Graphing Solution Sets for Inequalities
		ALG02U02C02L11D	Compound Sentences
		ALG02U03C03L16D	Solving Inequalities
		ALG02U10C01L03D	Open Sentences
		ALG02U10C01L04D	Open Sentences Continued
		ESSMAU03C02L07D	Inverse Operations
		ESSMAU06C02L08D	Solving Absolute Value Inequalities
MA.8-12.AII.10.0	Students graph quadratic functions and determine the maxima, minima, and zeros of the function.	ALG01U03C01L02D	Identifying Functions
		ALG01U03C01L04D	Modeling Functions
		ALG01U08C02L05D	Quadratic Functions
		ALG02U01C02L07D	Relations and Functions: Graphs
		ALG02U01C02L08D	Relations and Functions: Function Notation
		ALG02U03C01L01D	Line Graphs

Section	Description	OW Lesson ID	Title
		PRCU01C01L03D	Ordered-Pair Numbers: Rules of Corres.
		PRCU02C02L04D	2nd-Degree Functions: Solutions
		PRCU04C03L05D	Graphs of Sin and Cos
		PRCU04C04L07D	Other Graphs
MA.8-12.AII.11.1	Students understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents.	ALG01U07C02L05D	Multiplication
		ALG01U07C02L06D	Raising to a Power
		ALG01U07C02L07D	Division
		ALG02U01C03L13D	Multiplication and Division Part 1
		ALG02U01C03L14D	Multiplication and Division Part 2
		ALG02U08C01L02D	Fractional Exponents
		ALG02U08C02L08D	Evaluation of Logarithms
		ALG02U08C02L10D	General Properties of Logarithms
		ALG02U10C03L18D	Exponential Functions
		ALG02U10C03L19D	Exponential Functions Continued
		ESSMAU01C03L09D	Using Exponent Rules
		ESSMAU01C03L11D	Negative Whole-Number Exponents
		ESSMAU03C01L02D	Working with Exponents and Roots
		MAT08U02C01L04D	Squares and Square Roots
		MAT08U05C01L08D	Review: Factors, Multiples, and Rational Numbers
		MAT08U07C02L13D	Integers and Exponents
		MAT08U10C01L06D	Expressions, Variables, and Exponents (1)
		MAT08U10C01L07D	Expressions, Variables, and Exponents (2)
MA.8-12.AII.11.2	Students judge the validity of an argument according to whether the properties of real numbers, exponents, and logarithms have been applied correctly at each step.	ALG01U01C02L05D	Classifying and Comparing Numbers
		ALG01U07C02L05D	Multiplication
		ALG01U07C02L06D	Raising to a Power

Section	Description	OW Lesson ID	Title
		ALG01U07C02L07D	Division
		ALG02U01C03L13D	Multiplication and Division Part 1
		ALG02U01C03L14D	Multiplication and Division Part 2
		ALG02U04C01L01D	Products and Factoring
		ALG02U05C01L01D	Multiplying and Dividing with Fractions
		ALG02U08C01L01D	Exponential Functions
		ALG02U08C01L02D	Fractional Exponents
		ALG02U10C01L01D	Integers
		ALG02U10C01L02D	Integers Continued
		ESSMAU01C03L09D	Using Exponent Rules
		ESSMAU01C03L11D	Negative Whole-Number Exponents
		ESSMAU03C01L02D	Working with Exponents and Roots
		MAT08U02C01L04D	Squares and Square Roots
		MAT08U02C04L26D	Exploring Different Kinds of Numbers
		MAT08U05C01L08D	Review: Factors, Multiples, and Rational Numbers
		MAT08U07C02L13D	Integers and Exponents
		MAT08U10C01L06D	Expressions, Variables, and Exponents (1)
		MAT08U10C01L07D	Expressions, Variables, and Exponents (2)
MA.8-12.AII.12.0	Students know the laws of fractional exponents, understand exponential functions, and use these functions in problems involving exponential growth and decay.	ALG01U07C02L06D	Raising to a Power
		ALG01U07C02L07D	Division
		ALG02U04C01L01D	Products and Factoring
		ALG02U05C01L01D	Multiplying and Dividing with Fractions
		ALG02U08C01L01D	Exponential Functions
		ALG02U08C01L02D	Fractional Exponents
		ALG02U08C01L05D	Exponential Applications
		ALG02U08C02L15D	Logarithmic Applications
		ALG02U10C01L01D	Integers

Section	Description	OW Lesson ID	Title
		ALG02U10C01L02D	Integers Continued
		ALG02U10C03L18D	Exponential Functions
		ALG02U10C03L19D	Exponential Functions Continued
		PRCU02C04L12D	Exponential Function
MA.8-12.AII.13.0	Students use the definition of logarithms to translate between logarithms in any base.	ALG02U08C02L08D	Evaluation of Logarithms
		ALG02U08C02L10D	General Properties of Logarithms
		ALG02U10C03L18D	Exponential Functions
		ALG02U10C03L19D	Exponential Functions Continued
MA.8-12.AII.14.0	Students understand and use the properties of logarithms to simplify logarithmic numeric expressions and to identify their approximate values.	ALG02U08C02L08D	Evaluation of Logarithms
		ALG02U08C02L10D	General Properties of Logarithms
		ALG02U10C03L18D	Exponential Functions
		ALG02U10C03L19D	Exponential Functions Continued
MA.8-12.AII.15.0	Students determine whether a specific algebraic statement involving rational expressions, radical expressions, or logarithmic or exponential functions is sometimes true, always true, or never true.	ALG01U02C03L11D	Writing Equations From Word Problems
		ALG01U03C03L11D	Linear Equations
		ALG01U04C03L11D	Absolute Value Solution Sets
		ALG01U09C02L07D	Using the LCD
		ALG01U09C02L09D	Inequalities
		ALG02U02C02L04D	Solving Equations
		ALG02U02C02L11D	Compound Sentences
		ALG02U05C01L02D	Reducing Rational Expressions
		ALG02U05C03L10D	Equations with Fractions
		ALG02U08C01L01D	Exponential Functions

Section	Description	OW Lesson ID	Title
		ALG02U08C01L05D	Exponential Applications
		ALG02U08C02L07D	Logarithmic Functions
		ALG02U08C02L15D	Logarithmic Applications
		ALG02U10C01L03D	Open Sentences
		ALG02U10C01L04D	Open Sentences Continued
		ALG02U10C03L18D	Exponential Functions
		ALG02U10C03L19D	Exponential Functions Continued
		ESSMAU06C01L05D	Solutions of Linear Equations
		ESSMAU06C01L06D	Graphing Higher Power Functions
		ESSMAU06C03L12D	Multi-Step Word Problems (Rate)
		ESSMAU06C03L13D	Multi-Step Word Problems (Work)
		PRCU02C04L12D	Exponential Function
		PRCU02C04L13D	Logarithmic Function
MA.8-12.AII.16.0	Students demonstrate and explain how the geometry of the graph of a conic section (e.g., asymptotes, foci, eccentricity) depends on the coefficients of the quadratic equation representing it.	ALG01U08C02L06D	Transformations
		ALG02U06C02L06D	Quadratic Equations
		ALG02U10C03L16D	Quadratic Relations and Systems
		ALG02U10C03L17D	Quadratics Continued
		ESSMAU06C01L06D	Graphing Higher Power Functions
		PRCU08C01L01D	The Circle
		PRCU08C01L02D	The Circle Continued
		PRCU08C03L16D	Translation
		PRCU08C03L18D	Rotation
MA.8-12.AII.17.0	Given a quadratic equation of the form ax + by + cx + dy + e = 0, students can use the method for completing the square to put the equation into standard form and can recognize whether the graph of the equation is a circle, ellipse,	ALG01U08C01L02D	Distance

Section	Description	OW Lesson ID	Title
MA.8-12.AII.17.0	parabola, or hyperbola. Students can then graph the equation.		Distance
		ALG01U08C02L06D	Transformations
		ALG01U08C02L07D	Line of Symmetry
		ALG01U08C03L13A	Completing the Square
		ALG01U08C03L13D	Completing the Square
		ALG02U06C02L06D	Quadratic Equations
		ALG02U06C02L08D	Completing the Square
		ALG02U06C03L12D	Sum and Product of Roots
		ALG02U07C01L02D	Circle
		ALG02U07C01L03D	Ellipse
		ALG02U07C01L04D	Ellipse Continued
		ALG02U07C02L06D	Conic Sections: Parabola
		ALG02U07C02L07D	Conic Sections: Parabola Continued
		ALG02U07C02L08D	Conic Sections: Hyperbola
		ALG02U07C02L09D	Conic Sections: Hyperbola Continued
		GEOU08C02L06D	Equation of a Circle
		PRCU02C02L05D	Relationships Between Zeros and Coefficients
		PRCU08C01L02D	The Circle Continued
		PRCU08C01L03D	Equation from Three Points
		PRCU08C01L04D	Equation from Three Points Applied
		PRCU08C01L05D	The Ellipse
		PRCU08C01L06D	The Ellipse: Standard Form
		PRCU08C01L07D	The Ellipse: General Form
		PRCU08C01L08D	The Ellipse Applied
		PRCU08C02L10D	The Parabola
		PRCU08C02L11D	The Parabola Continued
		PRCU08C02L12D	The Parabola: Standard Form
		PRCU08C02L13D	The Parabola Applied

Section	Description	OW Lesson ID	Title
		PRCU08C02L14D	The Hyperbola
MA.8-12.AII.18.0	Students use fundamental counting principles to compute combinations and permutations.	ALG01U10C02L07D	Permutations
		ALG01U10C02L08D	Combinations
		ALG02U09C01L01D	Progressions: Sequences
		ALG02U09C02L04D	Permutations: Factorials
		ALG02U09C02L05D	Permutation Formula
		ALG02U09C02L06D	Permutations: Applications
		ALG02U09C03L08D	Combination Formula
		ALG02U09C03L09D	Combinations: Applications
		ALG02U09C04L13D	Probability: Equally Likely Outcomes
		ALG02U10C03L20D	Counting Principles
		ALG02U10C03L21D	Counting Principles Continued
		PRCU09C02L05D	Definitions
		PRCU09C02L06D	Permutation of N Things: Different
		PRCU09C02L07D	Permutation of N Things: Not All Different
		PRCU09C02L08D	Circular Permutations
		PRCU09C02L09D	Combinations
MA.8-12.AII.19.0	Students use combinations and permutations to compute probabilities.	ALG01U10C02L07D	Permutations
		ALG01U10C02L08D	Combinations
		ALG01U10C03P12D	Project: Probability
		ALG02U09C01L01D	Progressions: Sequences
		ALG02U09C02L04D	Permutations: Factorials
		ALG02U09C02L05D	Permutation Formula
		ALG02U09C02L06D	Permutations: Applications
		ALG02U09C03L08D	Combination Formula
		ALG02U09C03L09D	Combinations: Applications

Section	Description	OW Lesson ID	Title
		ALG02U10C03L20D	Counting Principles
		ALG02U10C03L21D	Counting Principles Continued
		MAT08U05C02L18D	Graphs and Probability
		PRCU09C01L03D	Multiplication of Probabilities
		PRCU09C02L05D	Definitions
		PRCU09C02L06D	Permutation of N Things: Different
		PRCU09C02L07D	Permutation of N Things: Not All Different
		PRCU09C02L08D	Circular Permutations
		PRCU09C02L09D	Combinations
		PRCU10C04L15D	Review Mathematics 1209 and 1210
MA.8-12.AII.2.0	Students solve systems of linear equations and inequalities (in two or three variables) by substitution, with graphs, or with matrices.	ALG01U04C01L02D	Addition Property of Inequality
		ALG01U04C01L03D	Multiplication Property of Inequality
		ALG01U04C01L05D	Problem Solving
		ALG01U04C02L09D	Inequalities in Two Variables
		ALG01U05C01L03D	Systems of Inequalities
		ALG01U05C02L05D	Substitution Method
		ALG01U05C02L07D	Matrices
		ALG02U02C02L08D	Literal Expressions
		ALG02U02C02L09D	Solving Inequalities
		ALG02U02C02L10D	Graphing Solution Sets for Inequalities
		ALG02U03C02L11D	Solutions for Systems of Equations
		ALG02U03C02L12D	Solutions by Addition
		ALG02U03C02L13D	Solutions by Substitution
		ALG02U03C02L14D	Application of Systems of Equations
		ALG02U03C03L16D	Solving Inequalities
		ALG02U07C03L13D	Systems of Inequalities
		ALG02U08C03L18D	System Solutions with Matrices

Section	Description	OW Lesson ID	Title
		ALG02U08C03L19D	Addition and Multiplication of Matrices
		ESSMAU06C03L16D	System of Linear Inequalities
MA.8-12.AII.20.0	Students know the binomial theorem and use it to expand binomial expressions that are raised to positive integer powers.	ALG02U09C03L10D	Combinations: Binomial Coefficients
MA.8-12.AII.21.0	Students apply the method of mathematical induction to prove general statements about the positive integers.	ALG02U09C01L01D	Progressions: Sequences
		CMAU01C01L02D	Number Skills
		CMAU01C01L03D	Signed Numbers and Measurement Scales
		MAT08U10C01L01D	Integers, Absolute Value, and Cartesian Planes
		MAT08U10C01L02D	Adding and Subtracting Integers
		MAT08U10C01L03D	Multiplying Integers
		MAT08U10C01L04D	Dividing Integers
		PRCU10C01L02D	Proofs by Mathematical Induction
MA.8-12.AII.22.0	Students find the general term and the sums of arithmetic series and of both finite and infinite geometric series.	ALG02U09C01L01D	Progressions: Sequences
		ALG02U10C03L20D	Counting Principles
		ALG02U10C03L21D	Counting Principles Continued
MA.8-12.AII.24.0	Students solve problems involving functional concepts, such as composition, defining the inverse function and performing arithmetic operations on functions.	ALG02U01C02L09D	Relations and Functions: Inverses
		PRCU01C02L06D	Algebra of Functions: Arithmetic
		PRCU01C02L07D	Algebra of Functions: Composition
		PRCU01C02L08D	Algebra of Functions: Inverse
		PRCU03C02L03D	Evaluation of Functions
MA.8-12.AII.25.0	Students use properties from number systems to justify steps in combining and simplifying functions.	PRCU01C02L06D	Algebra of Functions: Arithmetic

Section	Description	OW Lesson ID	Title
		PRCU03C02L03D	Evaluation of Functions
MA.8-12.AII.3.0	Students are adept at operations on polynomials, including long division.	ALG01U06C02L08D	Long Division
		ALG02U04C02L11D	Synthetic Division
MA.8-12.AII.4.0	Students factor polynomials representing the difference of squares, perfect square trinomials, and the sum and difference of two cubes.	ALG02U04C01L03D	Using Special Products Part 1
		ALG02U04C01L04D	Using Special Products Part 2
		ALG02U04C01L06D	Factoring Special Products Part 1
		ALG02U04C01L07D	Factoring Special Products Part 2
MA.8-12.AII.5.0	Students demonstrate knowledge of how real and complex numbers are related both arithmetically and graphically. In particular, they can plot complex numbers as points in the plane.	ALG01U01C02L05D	Classifying and Comparing Numbers
		MAT08U02C04L26D	Exploring Different Kinds of Numbers
MA.8-12.AII.7.0	Students add, subtract, multiply, divide, reduce, and evaluate rational expressions with monomial and polynomial denominators and simplify complicated rational expressions, including those with negative exponents in the denominator.	ALG01U06C01L01D	Add and Subtract Polynomials
		ALG01U06C01L02D	Grouping Symbols
		ALG01U06C02L04D	Multiplying by a Monomial
		ALG01U06C02L05D	Multiplying all Polynomials
		ALG01U06C02L07D	Dividing by a Monomial
		ALG01U06C02L08D	Long Division
		ALG01U09C01L02D	Multiply and Divide Rational Expressions
		ALG01U09C01L03D	Add and Subtract with Like Denominators
		ALG01U09C01L04D	Add and Subtract with Unlike Denominators
		ALG02U04C01L01D	Products and Factoring
		ALG02U04C01L02D	Multiplying Polynomials by Polynomials

Section	Description	OW Lesson ID	Title
		ALG02U04C02L09D	Addition and Subtraction Operations
		ALG02U04C02L10D	Division with Polynomials
		ALG02U04C02L11D	Synthetic Division
		ALG02U05C03L11D	Fractional Equations
		ESSMAU03C01L04D	Add and Subtract Polynomials
		ESSMAU03C01L05D	Multiply and Divide Polynomials
		IMA01U01C02L10D	Simplifying Expressions
		MAT08U08C01L06D	Multiplying Binomials
MA.8-12.AII.8.0	Students solve and graph quadratic equations by factoring, completing the square, or using the quadratic formula. Students apply these techniques in solving word problems. They also solve quadratic equations in the complex number system.	ALG01U08C03L10D	Solving by Factoring
		ALG01U08C03L13A	Completing the Square
		ALG01U08C03L13D	Completing the Square
		ALG01U08C03L14D	Quadratic Formula: Part 1
		ALG01U08C03L15D	Quadratic Formula: Part 2
		ALG02U05C02L07D	Addition and Subtraction
		ALG02U06C02L06D	Quadratic Equations
		ALG02U06C02L07D	Factoring Quadratic Equations
		ALG02U06C02L08D	Completing the Square
		ALG02U06C03L10D	Quadratic Formula
		ALG02U06C03L11D	Word Problems Using the Quadratic Formula
		ALG02U06C03L12D	Sum and Product of Roots
		ALG02U10C02L13D	Real Numbers
		ALG02U10C02L14D	Real Numbers Continued
		ESSMAU05C01L06D	Solving Problems
		MAT08U10C02L14D	Applications

Section	Description	OW Lesson ID	Title
MA.8-12.AII.9.0	Students demonstrate and explain the effect that changing a coefficient has on the graph of quadratic functions; that is, students can determine how the graph of a parabola changes as a, b, and c vary in the equation y = a(x - b) + c.	ALG01U08C02L05D	Quadratic Functions
		ALG01U08C02L06D	Transformations
		ALG01U08C02L07D	Line of Symmetry
		ALG02U07C02L06D	Conic Sections: Parabola
		ALG02U07C02L07D	Conic Sections: Parabola Continued
		PRCU01C01L03D	Ordered-Pair Numbers: Rules of Corres.
		PRCU02C02L04D	2nd-Degree Functions: Solutions
		PRCU02C02L05D	Relationships Between Zeros and Coefficients
		PRCU08C02L10D	The Parabola
		PRCU08C02L11D	The Parabola Continued
		PRCU08C02L12D	The Parabola: Standard Form
		PRCU08C02L13D	The Parabola Applied
MA.8-12.APPS.1.0	Students solve probability problems with finite sample spaces by using the rules for addition, multiplication, and complementation for probability distributions and understand the simplifications that arise with independent events.	ALG02U09C04L14D	Probability: Multiplication Principle
		MAT08U01C04L13D	Simple Probability
		MAT08U01C04L15D	Intersection of Sets: 'And' Statements
		PRCU09C01L01D	Definitions, Sample Spaces, and Probability
MA.8-12.APPS.10.0	Students know the definitions of the mean, median, and mode of distribution of data and can compute each of them in particular situations.	ALG01U10C01L01D	Measures of Central Tendency
		CMAU03C01L01D	Central Tendencies
		CMAU03C01L05D	Representing Data
		CMAU03C03L12D	Using the Standard Normal Distribution
		ESSMAU02C01L01D	Measures of Central Tendency
		MAT08U05C02L17D	Mean, Mode, Median, and Range

Section	Description	OW Lesson ID	Title
		MAT08U09C01L01D	Statistics: Mean
		MAT08U09C01L02D	Median and Mode
MA.8-12.APPS.11.0	Students compute the variance and the standard deviation of a distribution of data.	CMAU03C03L11D	Planning with Measures of Variations
		CMAU03C03L12D	Using the Standard Normal Distribution
MA.8-12.APPS.14.0	Students organize and describe distributions of data by using a number of different methods, including frequency tables, histograms, standard line graphs and bar graphs, stem-and-leaf displays, scatterplots, and box-and-whisker plots.	ALG01U10C01L01D	Measures of Central Tendency
		ALG01U10C01L02D	Dispersion
		ALG01U10C01P04D	Project: Data Analysis
		ALG01U10C03P12D	Project: Probability
		CMAU03C01L05D	Representing Data
		CMAU07C02L06D	Graphs and Trends
		CMAU07C03L11D	Graphs, Functions, Slope
		CMAU07C03P12A	Project: Data Summaries
		ESSMAU02C01L02D	Evaluating Statistical Claims
		ESSMAU05C01L04D	Estimation (2)
		ESSMAU06C01L01D	Graphs and Charts
		MAT08U05C02L18D	Graphs and Probability
		MAT08U09C01L02D	Median and Mode
		MAT08U09C02L05D	The Pictograph and Bar Graph
		MAT08U09C02L06D	Line Segment Graph, Histogram, and Frequency Polygon
		MAT08U09C02L07D	Bar Graphs and Line Segment Graphs
MA.8-12.APPS.15.0	Students are familiar with the notions of a statistic of a distribution of values, of the sampling distribution of a statistic, and of the variability of a statistic.	ALG01U10C01L01D	Measures of Central Tendency
		ALG01U10C02L06D	Sampling and Outcomes

Section	Description	OW Lesson ID	Title
		CMAU03C03L14D	Sampling and Estimation
MA.8-12.APPS.16.0	Students know basic facts concerning the relation between the mean and the standard deviation of a sampling distribution and the mean and the standard deviation of the population distribution.	ALG01U10C01L01D	Measures of Central Tendency
		CMAU03C01L01D	Central Tendencies
		CMAU03C03L11D	Planning with Measures of Variations
		CMAU03C03L12D	Using the Standard Normal Distribution
		CMAU03C03L14D	Sampling and Estimation
		ESSMAU02C01L01D	Measures of Central Tendency
		MAT08U05C02L17D	Mean, Mode, Median, and Range
		MAT08U09C01L01D	Statistics: Mean
MA.8-12.APPS.17.0	Students determine confidence intervals for a simple random sample from a normal distribution of data and determine the sample size required for a desired margin of error.	CMAU03C01L02D	Organizing Data
		CMAU03C03L14D	Sampling and Estimation
		CMAU03C04L17D	Confidence Intervals
		MAT08U01C04L13D	Simple Probability
		MAT08U05C02L18D	Graphs and Probability
MA.8-12.APPS.18.0	Students determine the P-value for a statistic for a simple random sample from a normal distribution.	CMAU03C01L02D	Organizing Data
		MAT08U01C04L13D	Simple Probability
		MAT08U05C02L18D	Graphs and Probability
MA.8-12.APPS.2.0	Students know the definition of conditional probability and use it to solve for probabilities in finite sample spaces.	ALG02U09C04L15D	Conditional Probability
		MAT08U01C04L13D	Simple Probability
		PRCU09C01L01D	Definitions, Sample Spaces, and Probability
		PRCU09C01L03D	Multiplication of Probabilities

Section	Description	OW Lesson ID	Title
		PRCU10C04L15D	Review Mathematics 1209 and 1210
MA.8-12.APPS.5.0	Students know the definition of the mean of a discrete random variable and can determine the mean for a particular discrete random variable.	ALG01U10C01L01D	Measures of Central Tendency
		CMAU03C01L01D	Central Tendencies
		CMAU03C03L12D	Using the Standard Normal Distribution
		ESSMAU02C01L01D	Measures of Central Tendency
		MAT08U05C02L17D	Mean, Mode, Median, and Range
		MAT08U09C01L01D	Statistics: Mean
MA.8-12.APPS.8.0	Students determine the mean and the standard deviation of a normally distributed random variable.	ALG01U10C01L01D	Measures of Central Tendency
		CMAU03C01L01D	Central Tendencies
		CMAU03C03L11D	Planning with Measures of Variations
		CMAU03C03L12D	Using the Standard Normal Distribution
		ESSMAU02C01L01D	Measures of Central Tendency
		MAT08U05C02L17D	Mean, Mode, Median, and Range
		MAT08U09C01L01D	Statistics: Mean
MA.8-12.APPS.9.0	Students know the central limit theorem and can use it to obtain approximations for probabilities in problems of finite sample spaces in which the probabilities are distributed binomially.	CMAU03C01L02D	Organizing Data
		CMAU03C03L14D	Sampling and Estimation
		MAT08U01C04L13D	Simple Probability
		PRCU09C01L01D	Definitions, Sample Spaces, and Probability
MA.8-12.C.1.1	Students prove and use theorems evaluating the limits of sums, products, quotients, and composition of functions.	PRCU01C02L07D	Algebra of Functions: Composition
		PRCU02C03L09D	Nth-Degree Equations
		PRCU10C02L04D	Functional Notation

Section	Description	OW Lesson ID	Title
		PRCU10C02L06D	Limits
MA.8-12.C.1.2	Students use graphical calculators to verify and estimate limits.	PRCU02C03L09D	Nth-Degree Equations
		PRCU10C02L04D	Functional Notation
		PRCU10C02L06D	Limits
MA.8-12.C.1.3	Students prove and use special limits, such as the limits of (sin(x))/x and (1 - cos(x))/x as x tends to 0.	PRCU02C03L09D	Nth-Degree Equations
		PRCU10C02L04D	Functional Notation
		PRCU10C02L06D	Limits
MA.8-12.C.18.0	Students know the definitions and properties of inverse trigonometric functions and the expression of these functions as indefinite integrals.	PRCU07C01L01D	The Inverse Sine Function
		PRCU07C02L03D	The Inverse Cosine Function
		PRCU07C03L05D	The Inverse Tangent Function
		PRCU07C04L07D	Other Inverse Functions
		PRCU10C04L14D	Review Mathematics 1207 and 1208
		TRGU02C02L07D	Inverse Functions
MA.8-12.C.22.0	Students understand improper integrals as limits of definite integrals.	PRCU02C03L09D	Nth-Degree Equations
		PRCU10C02L04D	Functional Notation
		PRCU10C02L06D	Limits
MA.8-12.C.4.4	Students derive derivative formulas and use them to find the derivatives of algebraic, trigonometric, inverse trigonometric, exponential, and logarithmic functions.	ALG02U08C01L01D	Exponential Functions
		ALG02U08C01L05D	Exponential Applications
		ALG02U08C02L07D	Logarithmic Functions
		ALG02U08C02L15D	Logarithmic Applications

Section	Description	OW Lesson ID	Title
		ALG02U10C03L18D	Exponential Functions
		ALG02U10C03L19D	Exponential Functions Continued
		PRCU02C04L12D	Exponential Function
		PRCU02C04L13D	Logarithmic Function
		PRCU07C01L01D	The Inverse Sine Function
		PRCU07C02L03D	The Inverse Cosine Function
		PRCU07C03L05D	The Inverse Tangent Function
		PRCU07C04L07D	Other Inverse Functions
		PRCU10C04L14D	Review Mathematics 1207 and 1208
MA.8-12.C.5.0	Students know the chain rule and its proof and applications to the calculation of the derivative of a variety of composite functions.	PRCU01C02L07D	Algebra of Functions: Composition
MA.8-12.G.1.0	Students demonstrate understanding by identifying and giving examples of undefined terms, axioms, theorems, and inductive and deductive reasoning.	ESSMAU05C01L05D	Inductive and Deductive Reasoning
		GEOU01C04L10D	Geometric Postulates
		GEOU01C04L12D	Geometric Theorems
		GEOU02C02L08D	Inductive Reasoning
		GEOU02C02L09D	Deductive Reasoning
		GEOU02C02L10D	Using Deductive Reasoning
		GEOU03C04L20D	Exterior/Remote Interior Angles of Triangle
		GEOU03C04L21D	Proofs Involving Triangles
		GEOU04C04L21D	Triangles that Use Parallelograms in Proofs
		GEOU10C01L01D	Geometry as a System
MA.8-12.G.10.0	Students compute areas of polygons, including rectangles, scalene triangles, equilateral triangles, rhombi, parallelograms, and trapezoids.	CMAU09C02L08D	Applications
		ESSMAU04C01L04D	Perimeter and Area: 2D Figures
		GEOU03C04L19D	Classifying Triangle by Sides and Angles

Section	Description	OW Lesson ID	Title
		GEOU04C03L18D	Quadrilateral Parallelograms Theorems Part1
		GEOU04C03L19D	Quadrilateral Parallelograms Theorems Part2
		GEOU04C04L22D	Parallelograms: Rectangles
		GEOU04C04L23D	Parallelograms: Rhombus
		GEOU04C04L24D	Trapezoids-Definitions and Proofs
		GEOU07C01L01D	Area Concepts of Polygons
		GEOU07C01L02D	Area of Rectangles
		GEOU07C01L03D	Area of Parallelograms
		GEOU07C01L04D	Area of Triangles and Rhombbuses
		GEOU07C01L05D	Area of Trapezoids
		GEOU07C01L06D	Area of Regular Polygons
		GEOU07C01L07D	Area Comparison of Polygons
		GEOU08C03L10D	Parallel and Perpendicular Lines
		GEOU10C03L09D	Area and Volume
		MAT08U06C01L04D	Types of Quadrilaterals
		PRCU03C06L11D	Special Angles
MA.8-12.G.11.0	Students determine how changes in dimensions affect the perimeter, area, and volume of common geometric figures and solids.	CMAU07C04L19D	Advertisements
		CMAU09C01L05D	Perimeter and Area
		CMAU09C02L08D	Applications
		CMAU09C02L10D	Area Applications
		CMAU10C05L22D	Geometry
		ESSMAU04C01L04D	Perimeter and Area: 2D Figures
		ESSMAU04C01L05D	Surface Area and Volume: 3D Figures
		ESSMAU04C02L08D	Complex 2D Objects
		GEOU10C03L09D	Area and Volume
		MAT08U06C01L01D	Area, Perimeter, and Square Roots

Section	Description	OW Lesson ID	Title
MA.8-12.G.12.0	Students find and use measures of sides and of interior and exterior angles of triangles and polygons to classify figures and solve problems.	GEOU03C03L11D	Transversals and Special Angles
		GEOU03C03L12D	More Proofs: Transversals and Special Angles
		GEOU03C03L13D	Continued Proofs: Transversals and Special Angles
		GEOU03C03L14D	More Proofs for Postulates 9 and 10
		GEOU03C04L20D	Exterior/Remote Interior Angles of Triangle
		GEOU05C03L15D	Using Triangles: Rectangular Solids
MA.8-12.G.13.0	Students prove relationships between angles in polygons by using properties of complementary, supplementary, vertical, and exterior angles.	GEOU03C02L04D	Relationship Definitions
		GEOU03C02L05D	Angle Relationship Theorems (1)
		GEOU03C03L11D	Transversals and Special Angles
		GEOU03C03L12D	More Proofs: Transversals and Special Angles
		GEOU03C03L13D	Continued Proofs: Transversals and Special Angles
		GEOU03C03L14D	More Proofs for Postulates 9 and 10
		GEOU06C03L10D	Special Angles Type 1
MA.8-12.G.14.0	Students prove the Pythagorean theorem.	ESSMAU04C03L12D	Pythagorean Theorem
		GEOU01C04L12D	Geometric Theorems
		GEOU03C04L20D	Exterior/Remote Interior Angles of Triangle
		GEOU03C04L21D	Proofs Involving Triangles
		GEOU04C04L21D	Triangles that Use Parallelograms in Proofs
		GEOU05C02L11D	The Pythagorean Theorem
		GEOU10C01L01D	Geometry as a System
MA.8-12.G.15.0	Students use the Pythagorean theorem to determine distance and find missing lengths of sides of right triangles.	ESSMAU04C03L12D	Pythagorean Theorem
		GEOU03C04L19D	Classifying Triangle by Sides and Angles
		GEOU03C04L21D	Proofs Involving Triangles

Section	Description	OW Lesson ID	Title
		GEOU05C02L10D	Similar Right Triangles
		GEOU05C02L11D	The Pythagorean Theorem
		GEOU05C02L12D	Theorem about 30-60-90 Right Triangles
		GEOU05C02L13D	Theorem about 45-45-90 Right Triangles
		TRGU01C01L01D	Lengths of Sides
MA.8-12.G.16.0	Students perform basic constructions with a straightedge and compass, such as angle bisectors, perpendicular bisectors, and the line parallel to a given line through a point off the line.	CMAU08C03P13A	Project: Constructions
		GEOU03C03L08D	Construction: Copying Figures
		GEOU03C03L09D	Construction: Bisecting Figures
		GEOU03C04L16D	Construction: Perpendiculars
		GEOU03C04L18D	Construction: Parallels
		GEOU07C04L21D	Construction: Dividing a Segment
MA.8-12.G.17.0	Students prove theorems by using coordinate geometry, including the midpoint of a line segment, the distance formula, and various forms of equations of lines and circles.	ALG01U08C01L02D	Distance
		ALG01U08C01L03D	Midpoint
		ALG02U07C01L02D	Circle
		GEOU01C03L08D	Defined Terms: Definitions
		GEOU01C04L12D	Geometric Theorems
		GEOU03C04L20D	Exterior/Remote Interior Angles of Triangle
		GEOU03C04L21D	Proofs Involving Triangles
		GEOU04C04L21D	Triangles that Use Parallelograms in Proofs
		GEOU08C02L05D	Distance Formula
		GEOU08C02L06D	Equation of a Circle
		GEOU08C02L07D	Midpoint Formula
		GEOU08C04L14D	Proofs with Coordinate Geometry (1)
		GEOU08C04L15D	Proofs with Coordinate Geometry (2)

Section	Description	OW Lesson ID	Title
		GEOU10C01L01D	Geometry as a System
		GEOU10C03L10D	Coordinate Geometry
		PRCU02C01L02D	Linear Functions: Equations
		PRCU08C01L02D	The Circle Continued
		PRCU08C01L03D	Equation from Three Points
		PRCU08C01L04D	Equation from Three Points Applied
MA.8-12.G.18.0	Students know the definitions of the basic trigonometric functions defined by the angles of a right triangle. They also know and are able to use elementary relationships between them. For example, tan(x) = sin(x)/cos(x), (sin(x)) + (cos(x)) = 1.	PRCU05C01L01D	Reciprocal Relations
		PRCU05C04L07D	Trigonometric Identities
		PRCU05C08L15D	Identities
		PRCU10C04L11D	Review Mathematics 1201 and 1202
		PRCU10C04L13D	Review Mathematics 1205 and 1206
		TRGU01C01L01D	Lengths of Sides
		TRGU01C01L02D	Angle Measures
		TRGU01C03L09D	Reciprocal Functions
		TRGU01C03L11D	Pythagorean Identities
		TRGU03C01L01D	The Fundamental Trigonometric Identities
MA.8-12.G.19.0	Students use trigonometric functions to solve for an unknown length of a side of a right triangle, given an angle and a length of a side.	GEOU03C04L19D	Classifying Triangle by Sides and Angles
		GEOU03C04L20D	Exterior/Remote Interior Angles of Triangle
		GEOU05C02L10D	Similar Right Triangles
		GEOU05C02L12D	Theorem about 30-60-90 Right Triangles
		GEOU05C02L13D	Theorem about 45-45-90 Right Triangles
		GEOU05C03L21D	Using Trigonometry in Indirect Measure
		PRCU06C02L03D	More Trigonometric Functions of Any Angle

Section	Description	OW Lesson ID	Title
		PRCU10C04L11D	Review Mathematics 1201 and 1202
		PRCU10C04L12D	Review Mathematics 1203 and 1204
		PRCU10C04L13D	Review Mathematics 1205 and 1206
		TRGU01C01L01D	Lengths of Sides
		TRGU01C01L03D	Indirect Measure
MA.8-12.G.2.0	Students write geometric proofs, including proofs by contradiction.	GEOU02C01L01D	Logic
		GEOU02C01L05D	Conditional or Implication Statements
		GEOU02C03L13D	Proof Formats: The Figure
		GEOU02C03L17D	Indirect Proof Format: The Paragraph Proof
MA.8-12.G.20.0	Students know and are able to use angle and side relationships in problems with special right triangles, such as 30°, 60°, and 90° triangles and 45°, 45°, and 90° triangles.	GEOU03C04L19D	Classifying Triangle by Sides and Angles
		GEOU03C04L20D	Exterior/Remote Interior Angles of Triangle
		GEOU05C02L09D	Theorems-Special Segments in Triangles
MA.8-12.G.21.0	Students prove and solve problems regarding relationships among chords, secants, tangents, inscribed angles, and inscribed and circumscribed polygons of circles.	GEOU06C02L04D	Tangents
		GEOU06C02L06D	Chords
		GEOU06C02L07D	Theorems (1)
		GEOU06C02L08D	Theorems (2)
		GEOU06C03L10D	Special Angles Type 1
		GEOU10C02L07D	Circles
MA.8-12.G.22.0	Students know the effect of rigid motions on figures in the coordinate plane and space, including rotations, translations, and reflections.	ALG01U08C02L06D	Transformations
		ESSMAU04C03L14D	Transformations and Congruent Figures
		GEOU09C01L01D	Introduction: Rigid Motion, or Isometry

Section	Description	OW Lesson ID	Title
		GEOU09C01L02D	Isometry: Reflection
		GEOU09C01L03D	Isometry: Translation
		GEOU09C01L04D	Isometry: Rotation
		GEOU09C02L07D	Product Transformation
		GEOU09C02L08D	Inverse and Identity Transformation
		MAT08U06C03L11D	Translations
		PRCU08C03L18D	Rotation
		PRCU08C03L19D	Rotation of Equations
MA.8-12.G.3.0	Students construct and judge the validity of a logical argument and give counterexamples to disprove a statement.	IMA01U01C03L12D	Drawing Conclusions
MA.8-12.G.4.0	Students prove basic theorems involving congruence and similarity.	ESSMAU04C03L14D	Transformations and Congruent Figures
		GEOU01C04L12D	Geometric Theorems
		GEOU03C04L20D	Exterior/Remote Interior Angles of Triangle
		GEOU03C04L21D	Proofs Involving Triangles
		GEOU04C04L21D	Triangles that Use Parallelograms in Proofs
		GEOU05C02L05D	Meaning of Similarity
		GEOU05C02L06D	Meaning of Similarity-Theorems
		GEOU05C02L07D	Meaning of Similarity-Proofs
		GEOU05C02L10D	Similar Right Triangles
		GEOU09C02L06D	Dilation: Congruence and Similarity
		GEOU10C01L01D	Geometry as a System
		MAT08U02C04L22D	Similar Figures and Scale Drawings
		MAT08U05C01L09D	Review: Decimals and Applications
MA.8-12.G.5.0	Students prove that triangles are congruent or similar, and they are able to use the concept of corresponding parts of congruent triangles.	GEOU04C01L01D	Defining Congruent Triangles

Section	Description	OW Lesson ID	Title
		GEOU04C01L02D	Proving Triangles Congruent (1)
		GEOU04C01L03D	Proving Triangles Congruent (2)
		GEOU04C01L04D	Proving Right Triangles Congruent
		GEOU04C02L06D	Independent Triangles (1)
		GEOU04C02L07D	Independent Triangles (2)
		GEOU04C02L08D	Overlapping Triangles (1)
		GEOU04C02L09D	Overlapping Triangles (2)
		GEOU05C03L20D	Using Similar Triangles in Indirect Measure
		GEOU10C02L05D	Congruent Triangles and Quadrilaterals
MA.8-12.G.6.0	Students know and are able to use the triangle inequality theorem.	GEOU03C04L21D	Proofs Involving Triangles
		GEOU04C03L15D	Inequality Theorem in One Triangle Part1
		GEOU04C03L16D	Inequality Theorem in One Triangle Part2
		GEOU04C03L17D	Inequalities in Two Triangles
MA.8-12.G.7.0	Students prove and use theorems involving the properties of parallel lines cut by a transversal, the properties of quadrilaterals, and the properties of circles.	GEOU01C04L12D	Geometric Theorems
		GEOU03C03L11D	Transversals and Special Angles
		GEOU03C03L12D	More Proofs: Transversals and Special Angles
		GEOU03C03L13D	Continued Proofs: Transversals and Special Angles
		GEOU03C03L14D	More Proofs for Postulates 9 and 10
		GEOU03C04L20D	Exterior/Remote Interior Angles of Triangle
		GEOU03C04L21D	Proofs Involving Triangles
		GEOU04C04L21D	Triangles that Use Parallelograms in Proofs
		GEOU10C01L01D	Geometry as a System
		GEOU10C01L03D	Angle Relationships and Parallels
		GEOU10C02L07D	Circles

Section	Description	OW Lesson ID	Title
MA.8-12.G.8.0	Students know, derive, and solve problems involving the perimeter, circumference, area, volume, lateral area, and surface area of common geometric figures.	CMAU07C04L19D	Advertisements
		CMAU09C01L05D	Perimeter and Area
		CMAU09C02L08D	Applications
		CMAU09C02L10D	Area Applications
		CMAU09C03L12D	Solid Figures with Plane Boundaries
		CMAU09C03L13D	Solid Figures with Curved Boundaries
		CMAU10C05L22D	Geometry
		ESSMAU04C01L04D	Perimeter and Area: 2D Figures
		ESSMAU04C01L05D	Surface Area and Volume: 3D Figures
		ESSMAU04C02L08D	Complex 2D Objects
		ESSMAU04C02L09D	Complex 3D Objects
		GEOU07C01L01D	Area Concepts of Polygons
		GEOU07C01L02D	Area of Rectangles
		GEOU07C01L03D	Area of Parallelograms
		GEOU07C01L04D	Area of Triangles and Rhombbuses
		GEOU07C01L05D	Area of Trapezoids
		GEOU07C01L06D	Area of Regular Polygons
		GEOU07C01L07D	Area Comparison of Polygons
		GEOU07C03L15D	Solids: Prisms
		GEOU07C03L16D	Solids: Pyramids
		GEOU07C03L17D	Solids: Cylinders
		GEOU07C03L18D	Solids: Cones
		GEOU10C03L09D	Area and Volume
		MAT08U06C01L01D	Area, Perimeter, and Square Roots
		MAT08U06C02L06D	Rectangular Solids
		MAT08U06C02L07D	Pyramids and Prisms
		MAT08U10C02L11D	Area and Volume

Section	Description	OW Lesson ID	Title
MA.8-12.G.9.0	Students compute the volumes and surface areas of prisms, pyramids, cylinders, cones, and spheres; and students commit to memory the formulas for prisms, pyramids, and cylinders.	CMAU09C03L12D	Solid Figures with Plane Boundaries
		CMAU09C03L13D	Solid Figures with Curved Boundaries
		CMAU10C05L22D	Geometry
		ESSMAU04C01L05D	Surface Area and Volume: 3D Figures
		ESSMAU04C02L09D	Complex 3D Objects
		GEOU05C03L16D	Using Triangles: Regular Square Pyramid
		GEOU06C01L02D	Characteristics of Spheres
		GEOU07C03L16D	Solids: Pyramids
		GEOU07C03L17D	Solids: Cylinders
		GEOU07C03L18D	Solids: Cones
		GEOU07C03L19D	Solids: Spheres
		GEOU10C03L09D	Area and Volume
		MAT08U06C01L01D	Area, Perimeter, and Square Roots
		MAT08U06C02L06D	Rectangular Solids
		MAT08U06C02L07D	Pyramids and Prisms
		MAT08U06C03L09D	Solid Figures
		MAT08U08C01L03D	Variables in Formulas
		MAT08U10C02L10D	Geometric Formulas and Square Roots
		MAT08U10C02L11D	Area and Volume
MA.8-12.LA.10.0	Students compute the determinants of 2 x 2 and 3 x 3 matrices and are familiar with their geometric interpretations as the area and volume of the parallelepipeds spanned by the images under the matrices of the standard basis vectors in two-dimensional and three-dimensional spaces.	ALG02U08C03L17D	Matrices
		ALG02U08C03L19D	Addition and Multiplication of Matrices
		ALG02U10C03L18D	Exponential Functions
		ALG02U10C03L19D	Exponential Functions Continued

Section	Description	OW Lesson ID	Title
MA.8-12.LA.12.0	Students compute the scalar (dot) product of two vectors in n -dimensional space and know that perpendicular vectors have zero dot product.	TRGU04C02L10D	Vector Multiplication
MA.8-12.LA.4.0	Students perform addition on matrices and vectors.	TRGU04C02L07D	Introduction to Vectors
		TRGU04C02L08D	Vector Components
		TRGU04C02L09D	Navigation Application
		TRGU04C02L10D	Vector Multiplication
MA.8-12.LA.5.0	Students perform matrix multiplication and multiply vectors by matrices and by scalars.	TRGU04C02L10D	Vector Multiplication
MA.8-12.LA.6.0	Students demonstrate an understanding that linear systems are inconsistent (have no solutions), have exactly one solution, or have infinitely many solutions.	ALG01U05C02L07D	Matrices
		ALG02U08C03L18D	System Solutions with Matrices
		ALG02U08C03L19D	Addition and Multiplication of Matrices
MA.8-12.LA.7.0	Students demonstrate an understanding of the geometric interpretation of vectors and vector addition (by means of parallelograms) in the plane and in three-dimensional space.	GEOU04C03L18D	Quadrilateral Parallelograms Theorems Part1
		GEOU04C03L19D	Quadrilateral Parallelograms Theorems Part2
		GEOU04C04L22D	Parallelograms: Rectangles
		GEOU08C03L10D	Parallel and Perpendicular Lines
		MAT08U06C01L04D	Types of Quadrilaterals
		TRGU04C02L07D	Introduction to Vectors
		TRGU04C02L08D	Vector Components
		TRGU04C02L09D	Navigation Application
		TRGU04C02L10D	Vector Multiplication
MA.8-12.LA.8.0	Students interpret geometrically the solution sets of systems of equations. For example, the solution set of a single linear equation in two variables is interpreted as a line in the plane,	ALG02U03C02L11D	Solutions for Systems of Equations

Section	Description	OW Lesson ID	Title
MA.8-12.LA.8.0	and the solution set of a two-by-two system is interpreted as the intersection of a pair of lines in the plane.		Solutions for Systems of Equations
		ALG02U03C02L12D	Solutions by Addition
		ALG02U03C02L14D	Application of Systems of Equations
		ESSMAU06C03L16D	System of Linear Inequalities
MA.8-12.MA.1.0	Students are familiar with, and can apply, polar coordinates and vectors in the plane. In particular, they can translate between polar and rectangular coordinates and can interpret polar coordinates and vectors graphically.	PRCU07C07L13D	Converting Coordinates
		TRGU04C02L08D	Vector Components
		TRGU05C01L01D	Introduction to Polar Coordinates
		TRGU05C01P03D	Project: Graphing in the Polar Plane
MA.8-12.MA.2.0	Students are adept at the arithmetic of complex numbers. They can use the trigonometric form of complex numbers and understand that a function of a complex variable can be viewed as a function of two real variables. They know the proof of DeMoivre's theorem.	PRCU07P21D	Project: De Moivre's Theorem
		TRGU05C02L09D	Powers and Nth Roots
MA.8-12.MA.3.0	Students can give proofs of various formulas by using the technique of mathematical induction.	ALG01U05C03L12D	Using Formulas
		ALG02U09C01L01D	Progressions: Sequences
		PRCU10C01L02D	Proofs by Mathematical Induction
MA.8-12.MA.5.1	Students can take a quadratic equation in two variables; put it in standard form by completing the square and using rotations and translations, if necessary; determine what type of conic section the equation represents; and determine its geometric components (foci, asymptotes, and so forth).	ALG01U08C02L06D	Transformations
		ALG01U08C03L13A	Completing the Square
		ALG01U08C03L13D	Completing the Square
		ALG02U06C02L06D	Quadratic Equations

Section	Description	OW Lesson ID	Title
		ALG02U06C02L08D	Completing the Square
		ALG02U06C03L12D	Sum and Product of Roots
		ALG02U07C02L10D	Identifying Conic Sections
		ALG02U07C03L14D	Applications of Conic Sections
		ALG02U10C03L16D	Quadratic Relations and Systems
		ALG02U10C03L17D	Quadratics Continued
		ESSMAU04C03L14D	Transformations and Congruent Figures
		GEOU09C01L01D	Introduction: Rigid Motion, or Isometry
		GEOU09C01L03D	Isometry: Translation
		GEOU09C01L04D	Isometry: Rotation
		GEOU09C02L07D	Product Transformation
		MAT08U06C03L11D	Translations
		PRCU08C01L01D	The Circle
		PRCU08C01L02D	The Circle Continued
		PRCU08C03L16D	Translation
		PRCU08C03L18D	Rotation
		PRCU08C03L19D	Rotation of Equations
MA.8-12.MA.5.2	Students can take a geometric description of a conic section - for example, the locus of points whose sum of its distances from (1, 0) and (-1, 0) is 6 - and derive a quadratic equation representing it.	GEOU08C01L03D	Graphs of Algebraic Sentences
		PRCU08C01L01D	The Circle
		PRCU08C01L02D	The Circle Continued
MA.8-12.MA.7.0	Students demonstrate an understanding of functions and equations defined parametrically and can graph them.	ALG01U03C01L02D	Identifying Functions
		ALG01U03C01L04D	Modeling Functions
		ALG02U01C02L07D	Relations and Functions: Graphs
		ALG02U01C02L08D	Relations and Functions: Function Notation
		ALG02U03C01L01D	Line Graphs

Section	Description	OW Lesson ID	Title
		ALG02U10C01L05D	Graphs
		ALG02U10C01L06D	Graphs Continued
		MAT08U09C02L08D	Number Patterns and Functions
		MAT08U10C01L08D	Graphing Algebraic Sentences
		PRCU04C03L05D	Graphs of Sin and Cos
		PRCU04C04L07D	Other Graphs
		TRGU01P17D	Project: Parametric Equations
MA.8-12.MA.8.0	Students are familiar with the notion of the limit of a sequence and the limit of a function as the independent variable approaches a number or infinity. They determine whether certain sequences converge or diverge.	ESSMAU02C02L07D	Independent and Dependent Variables
		PRCU01C01L01D	Ordered-Pair Numbers: Relations
		PRCU01C02L05D	Algebra of Functions: Notation
		PRCU02C03L09D	Nth-Degree Equations
		PRCU10C02L04D	Functional Notation
		PRCU10C02L06D	Limits
MA.8-12.PS.1.0	Students know the definition of the notion of independent events and can use the rules for addition, multiplication, and complementation to solve for probabilities of particular events in finite sample spaces.	ALG02U09C04L14D	Probability: Multiplication Principle
		MAT08U01C04L13D	Simple Probability
		MAT08U01C04L15D	Intersection of Sets: 'And' Statements
		PRCU09C01L01D	Definitions, Sample Spaces, and Probability
MA.8-12.PS.2.0	Students know the definition of conditional probability and use it to solve for probabilities in finite sample spaces.	ALG02U09C04L15D	Conditional Probability
		MAT08U01C04L13D	Simple Probability
		PRCU09C01L01D	Definitions, Sample Spaces, and Probability
		PRCU09C01L03D	Multiplication of Probabilities
		PRCU10C04L15D	Review Mathematics 1209 and 1210

Section	Description	OW Lesson ID	Title
MA.8-12.PS.5.0	Students determine the mean and the standard deviation of a normally distributed random variable.	ALG01U10C01L01D	Measures of Central Tendency
		CMAU03C01L01D	Central Tendencies
		CMAU03C01L02D	Organizing Data
		CMAU03C03L11D	Planning with Measures of Variations
		CMAU03C03L12D	Using the Standard Normal Distribution
		ESSMAU02C01L01D	Measures of Central Tendency
		MAT08U01C04L13D	Simple Probability
		MAT08U05C02L17D	Mean, Mode, Median, and Range
		MAT08U05C02L18D	Graphs and Probability
		MAT08U09C01L01D	Statistics: Mean
MA.8-12.PS.6.0	Students know the definitions of the mean, median, and mode of a distribution of data and can compute each in particular situations.	ALG01U10C01L01D	Measures of Central Tendency
		CMAU03C01L01D	Central Tendencies
		CMAU03C01L05D	Representing Data
		CMAU03C03L12D	Using the Standard Normal Distribution
		ESSMAU02C01L01D	Measures of Central Tendency
		MAT08U05C02L17D	Mean, Mode, Median, and Range
		MAT08U09C01L01D	Statistics: Mean
		MAT08U09C01L02D	Median and Mode
MA.8-12.PS.7.0	Students compute the variance and the standard deviation of a distribution of data.	CMAU03C03L11D	Planning with Measures of Variations
		CMAU03C03L12D	Using the Standard Normal Distribution
MA.8-12.PS.8.0	Students organize and describe distributions of data by using a number of different methods, including frequency tables, histograms, standard line and bar graphs, stem-and-leaf displays, scatterplots, and box-and-whisker plots.	ALG01U10C01L01D	Measures of Central Tendency

Section	Description	OW Lesson ID	Title
		ALG01U10C01L02D	Dispersion
		ALG01U10C01P04D	Project: Data Analysis
		ALG01U10C03P12D	Project: Probability
		CMAU03C01L05D	Representing Data
		CMAU07C02L06D	Graphs and Trends
		CMAU07C03L11D	Graphs, Functions, Slope
		CMAU07C03P12A	Project: Data Summaries
		ESSMAU02C01L02D	Evaluating Statistical Claims
		ESSMAU05C01L04D	Estimation (2)
		ESSMAU06C01L01D	Graphs and Charts
		MAT08U05C02L18D	Graphs and Probability
		MAT08U09C01L02D	Median and Mode
		MAT08U09C02L05D	The Pictograph and Bar Graph
		MAT08U09C02L06D	Line Segment Graph, Histogram, and Frequency Polygon
		MAT08U09C02L07D	Bar Graphs and Line Segment Graphs
MA.8-12.T.1.0	Students understand the notion of angle and how to measure it, in both degrees and radians. They can convert between degrees and radians.	CMAU08C01L04D	Angles
		GEOU03C01L02D	Angle Measurement
		GEOU03C02L06D	Angle Relationship Theorems (2)
		PRCU03C07L13D	Radian Measure
		TRGU01C04L13D	Radian Measure
MA.8-12.T.10.0	Students demonstrate an understanding of the addition formulas for sines and cosines and their proofs and can use those formulas to prove and/or simplify other trigonometric identities.	GEOU05C03L17D	Trigonometry-Sine Ratio
		GEOU05C03L18D	Trigonometry-Cosine Ratio
		PRCU03C01L01D	Definition of the Trigonometric Functions
		PRCU05C01L01D	Reciprocal Relations

Section	Description	OW Lesson ID	Title
		PRCU05C04L07D	Trigonometric Identities
		PRCU05C05L09D	Cosine of the Sum of Two Angles
		PRCU05C08L15D	Identities
		PRCU10C04L13D	Review Mathematics 1205 and 1206
		TRGU03C01L03D	Cosine Addition Formula
		TRGU03C01L04D	Sine Addition Formula
		TRGU03C01L05D	Tangent Addition Formula
		TRGU03C02L07D	Double-Angle Formulas
		TRGU03C02L09D	Half-Angle Formulas
		TRGU03C02L10D	Converting Between Products and Sums
MA.8-12.T.11.0	Students demonstrate an understanding of half-angle and double-angle formulas for sines and cosines and can use those formulas to prove and/or simplify other trigonometric identities.	PRCU05C07L13D	Double- and Half-Angle Formulas
		TRGU03C02L07D	Double-Angle Formulas
		TRGU03C02L09D	Half-Angle Formulas
MA.8-12.T.12.0	Students use trigonometry to determine unknown sides or angles in right triangles.	GEOU03C04L19D	Classifying Triangle by Sides and Angles
		GEOU03C04L20D	Exterior/Remote Interior Angles of Triangle
		GEOU05C02L10D	Similar Right Triangles
		GEOU05C02L12D	Theorem about 30-60-90 Right Triangles
		GEOU05C02L13D	Theorem about 45-45-90 Right Triangles
		GEOU05C03L21D	Using Trigonometry in Indirect Measure
		TRGU01C01L01D	Lengths of Sides
		TRGU01C01L02D	Angle Measures
		TRGU01C01L03D	Indirect Measure
MA.8-12.T.13.0	Students know the law of sines and the law of cosines and apply those laws to solve problems.	GEOU05C03L21D	Using Trigonometry in Indirect Measure

Section	Description	OW Lesson ID	Title
		PRCU05C05L09D	Cosine of the Sum of Two Angles
		PRCU06C01L01D	Trigonometric Functions of Any Angle
		PRCU06C03L06D	Law of Cosines
		PRCU06C04L08D	Law of Sines
		PRCU06C05L10D	More Applications
		PRCU06C06L13D	Navigation Application
		TRGU04C01L01D	Law of Sines
		TRGU04C01L02D	Ambiguity and Area of a Triangle
		TRGU04C01L03D	Law of Cosines: Finding a Side
		TRGU04C01L04D	Law of Cosines: Finding an Angle
		TRGU04C02L07D	Introduction to Vectors
		TRGU04C02L09D	Navigation Application
MA.8-12.T.14.0	Students determine the area of a triangle, given one angle and the two adjacent sides.	ESSMAU04C01L04D	Perimeter and Area: 2D Figures
		GEOU05C03L21D	Using Trigonometry in Indirect Measure
		GEOU07C01L01D	Area Concepts of Polygons
		GEOU07C01L02D	Area of Rectangles
		GEOU07C01L03D	Area of Parallelograms
		GEOU07C01L04D	Area of Triangles and Rhombbuses
		GEOU07C01L05D	Area of Trapezoids
		GEOU07C01L06D	Area of Regular Polygons
		GEOU07C01L07D	Area Comparison of Polygons
		GEOU10C03L09D	Area and Volume
		TRGU04C01L02D	Ambiguity and Area of a Triangle
MA.8-12.T.15.0	Students are familiar with polar coordinates. In particular, they can determine polar coordinates of a point given in rectangular coordinates and vice versa.	PRCU07C06L11D	Graphing Polar Coordinates
		PRCU07C07L13D	Converting Coordinates

Section	Description	OW Lesson ID	Title
		PRCU10C04L14D	Review Mathematics 1207 and 1208
		TRGU05C01L01D	Introduction to Polar Coordinates
MA.8-12.T.16.0	Students represent equations given in rectangular coordinates in terms of polar coordinates.	PRCU07C06L11D	Graphing Polar Coordinates
		PRCU07C07L13D	Converting Coordinates
		PRCU10C04L14D	Review Mathematics 1207 and 1208
		TRGU05C01L02D	Polar Equations
MA.8-12.T.17.0	Students are familiar with complex numbers. They can represent a complex number in polar form and know how to multiply complex numbers in their polar form.	TRGU05C02L07D	Polar Form of Complex Numbers
		TRGU05C02L08D	Multiply and Divide Complex Numbers
MA.8-12.T.18.0	Students know DeMoivre's theorem and can give nth roots of a complex number given in polar form.	PRCU07P21D	Project: De Moivre's Theorem
		TRGU05C02L09D	Powers and Nth Roots
MA.8-12.T.19.0	Students are adept at using trigonometry in a variety of applications and word problems.	ESSMAU05C01L06D	Solving Problems
		GEOU05C03L21D	Using Trigonometry in Indirect Measure
		TRGU01C01L03D	Indirect Measure
MA.8-12.T.2.0	Students know the definition of sine and cosine as y- and x-coordinates of points on the unit circle and are familiar with the graphs of the sine and cosine functions.	GEOU05C03L17D	Trigonometry-Sine Ratio
		GEOU05C03L18D	Trigonometry-Cosine Ratio
		PRCU03C01L01D	Definition of the Trigonometric Functions
		PRCU04C01L01D	Circular Functions
		PRCU05C05L09D	Cosine of the Sum of Two Angles
		TRGU01C02L07D	Trigonometric Values of Special Angles
		TRGU01C03L10D	Points on the Terminal Side

Section	Description	OW Lesson ID	Title
MA.8-12.T.3.1	Students prove that this identity is equivalent to the Pythagorean theorem (i.e., students can prove this identity by using the Pythagorean theorem and, conversely, they can prove the Pythagorean theorem as a consequence of this identity).	ESSMAU04C03L12D	Pythagorean Theorem
		GEOU01C04L12D	Geometric Theorems
		GEOU02C01L06D	Converse, Inverse, Contrapositive
		GEOU03C04L20D	Exterior/Remote Interior Angles of Triangle
		GEOU03C04L21D	Proofs Involving Triangles
		GEOU04C04L21D	Triangles that Use Parallelograms in Proofs
		GEOU05C02L11D	The Pythagorean Theorem
		GEOU10C01L01D	Geometry as a System
		PRCU05C02L03D	Pythagorean Relations
		TRGU01C03L11D	Pythagorean Identities
MA.8-12.T.3.2	Students prove other trigonometric identities and simplify others by using the identity cos(x) + sin(x) = 1. For example, students use this identity to prove that sec(x) = tan(x) + 1.	PRCU05C01L01D	Reciprocal Relations
		PRCU05C04L07D	Trigonometric Identities
		PRCU05C08L15D	Identities
		PRCU10C04L13D	Review Mathematics 1205 and 1206
		TRGU01C03L11D	Pythagorean Identities
		TRGU03C01L01D	The Fundamental Trigonometric Identities
		TRGU03C01L02D	Proving Identities
		TRGU03C02L10D	Converting Between Products and Sums
MA.8-12.T.4.0	Students graph functions of the form f(t) = A sin (Bt + C) or f(t) = A cos (Bt + C) and interpret A, B, and C in terms of amplitude, frequency, period, and phase shift.	PRCU04C03L05D	Graphs of Sin and Cos
		PRCU04C04L07D	Other Graphs
		PRCU04C06L11D	Amplitude of Circular Functions
		PRCU04C07L13D	Period of Circular Functions

Section	Description	OW Lesson ID	Title
		PRCU04C08L15D	Phase Shift of Circular Functions
		PRCU07C05L09D	Graphs of Inverse Functions
		PRCU10C04L12D	Review Mathematics 1203 and 1204
		TRGU02C01L01D	Graphing and Amplitude
		TRGU02C01L03D	Period and Frequency
		TRGU02C01L04D	Vertical and Horizontal Translations
		TRGU02C01L05D	Sinusoidal Functions
		TRGU02P12D	Project: Modeling with Periodic Functions
		TRGU03P12D	Project: Adding Waves
MA.8-12.T.5.0	Students know the definitions of the tangent and cotangent functions and can graph them.	GEOU05C03L19D	Trigonometry-Tangent Ratio
		PRCU03C01L01D	Definition of the Trigonometric Functions
		PRCU04C03L05D	Graphs of Sin and Cos
		PRCU04C04L07D	Other Graphs
		PRCU05C03L05D	Quotient Relations
		PRCU07C05L09D	Graphs of Inverse Functions
		PRCU10C04L12D	Review Mathematics 1203 and 1204
		TRGU02C01L01D	Graphing and Amplitude
		TRGU02C01P02D	Project: The Reciprocal Functions
MA.8-12.T.6.0	Students know the definitions of the secant and cosecant functions and can graph them.	PRCU03C01L01D	Definition of the Trigonometric Functions
		PRCU04C03L05D	Graphs of Sin and Cos
		PRCU04C04L07D	Other Graphs
		PRCU07C05L09D	Graphs of Inverse Functions
		PRCU10C04L12D	Review Mathematics 1203 and 1204
		TRGU02C01P02D	Project: The Reciprocal Functions
MA.8-12.T.7.0	Students know that the tangent of the angle that a line	GEOU05C03L19D	Trigonometry-Tangent Ratio

Section	Description	OW Lesson ID	Title
MA.8-12.T.7.0	makes with the x-axis is equal to the slope of the line.		Trigonometry-Tangent Ratio
		GEOU08C03L09D	Slope
		PRCU03C01L01D	Definition of the Trigonometric Functions
		PRCU05C03L05D	Quotient Relations
MA.8-12.T.8.0	Students know the definitions of the inverse trigonometric functions and can graph the functions.	PRCU04C03L05D	Graphs of Sin and Cos
		PRCU04C04L07D	Other Graphs
		PRCU07C01L01D	The Inverse Sine Function
		PRCU07C02L03D	The Inverse Cosine Function
		PRCU07C03L05D	The Inverse Tangent Function
		PRCU07C04L07D	Other Inverse Functions
		PRCU07C05L09D	Graphs of Inverse Functions
		PRCU10C04L12D	Review Mathematics 1203 and 1204
		PRCU10C04L14D	Review Mathematics 1207 and 1208
		TRGU02C02L07D	Inverse Functions
		TRGU02C02L08D	Inverse Reciprocal Functions
MA.8-12.T.9.0	Students compute, by hand, the values of the trigonometric functions and the inverse trigonometric functions at various standard points.	PRCU06C02L03D	More Trigonometric Functions of Any Angle
		PRCU07C01L01D	The Inverse Sine Function
		PRCU07C02L03D	The Inverse Cosine Function
		PRCU07C03L05D	The Inverse Tangent Function
		PRCU07C04L07D	Other Inverse Functions
		PRCU10C04L11D	Review Mathematics 1201 and 1202
		PRCU10C04L12D	Review Mathematics 1203 and 1204
		PRCU10C04L13D	Review Mathematics 1205 and 1206
		PRCU10C04L14D	Review Mathematics 1207 and 1208
		TRGU02C02L07D	Inverse Functions

Section	Description	OW Lesson ID	Title
Standard:	**Content Standards for CAPA and Star CAPA Blueprints**		
Grade:	**9-12**		
MA.9-12.MG.3.1.1.1	Measure the liquid volume of a given quantity (i.e., 1/4 cup, 1/2 cup, and 1 cup).	CMAU10C05L22D	Geometry
		ESSMAU04C01L05D	Surface Area and Volume: 3D Figures
		GEOU10C03L09D	Area and Volume
MA.9-12.NS.2.1.3.1	Order and compare numbers up to 100.	IMA01U01C01L01D	Classifying and Comparing Numbers
MA.9-12.NS.3.3.2.1	Using concrete objects, add unit fractions with like denominators (i.e., 1/2, 1/4).	CMAU01C02L09D	Fractions
		CMAU01C03L14D	Consumer Applications
MA.9-12.NS.7.1.2.1	Add and subtract whole numbers with sums up to 100.	CMAU01C01L03D	Signed Numbers and Measurement Scales