A, M A, M A, M T, A, M	Evaluative Criteria consists of: ● Is the correct method used to solve the problem ● Is the analysis of the problem accurate ● Is the mathematics completed correctly ● Are students using correct mathematical terminology	OTHER EVIDENCE: ● Alternative assessment projects such as posters, drawings, pictures and real world applications ● Review of standardized test questions to prep students for the challenge of the SAT and college placement tests ● Performance tasks modeling real world and application problems ● Quizzes ● Unit Test - to include a variety of DOK level problems and may include SAT style problems.

Code	***Pre-Assessment***	
T, M **T, M, A**	● Teacher checks for prerequisite skills and prior knowledge via warm-up and questioning activities, such as factoring and graphing functions ● Prerequisite knowledge will be reviewed as it is incorporated into topics both in class and on review assignments	
	Summary of Key Learning Events and Instruction *Student success at transfer meaning and acquisition depends on…*	Progress Monitoring
T, M, A	● Teacher will give warm up questions to lead into and review the concept of an imaginary number. Complex numbers will also be discussed, and teacher will model examples of simplifying and performing operations of addition, subtraction, multiplication, and division with complex numbers.	● Warm up questions ● Monitoring class work through board work, group work, questioning, and walk-arounds
M, A	● Students will give ideas and examples of imaginary and complex numbers. Students will work as a class and then independently simplifying and performing mathematical operations with complex numbers. Individual students will put up answers to practice problems on the board.	● Check for understanding via going over homework and medium such as reflections and exit tickets ● Class worksheets with direct teacher observation or self assessment
T, M, A	● Teacher will use the overhead graphing calculator or smart board technology to facilitate class discovery of the effect the values a, h, and k have on the graphing form of a quadratic function ($y = a(x-h)^2+k$). Teacher will then use that discovery to introduce the key features of the graph of a parabola: vertex, axis of symmetry, direction of opening, max/min value, x- and y- intercept, domain and range. Teacher will model, with help from students, how to graph a parabola from that information. After mastery of this, teacher will build on the topic by modeling how to get any quadratic function into graphing form by the method of completing the square.	● Practice on whiteboard/chalkboard with direct teacher observation ● Kahoot quizzes with review questions and direct teacher observation ● Google form or other review assignments ● Homework assignments with direct teacher observation or self assessment
T, M, A	● Students will discover the properties of the graphing form of a quadratic function by observing the changes of the graph of a parabola when different values are inserted.	● Differentiate through purposeful or flexible grouping, use of diagrams and explanations to demonstrate understanding and active

	Students will then work as a class and in pairs to find the key values of a parabola and to graph it. Student work will be put on the board as a way to review and monitor progress.	lessons involving discovery, scaffolding, jigsaw activities and use of hands-on manipulatives
M, A	● Students will practice completing the square to get a quadratic function in graphing form by working in teacher created groups.	● Summative assessments Quizzes Unit test
T, M, A	● Teacher will introduce the graphs of polynomial functions by using the graphing calculator or smart board technology and student discovery of the nature of the graphs. Teacher will then model the steps to graphing polynomial functions by hand.	
M, A	● Students will work independently or in pairs to discover the nature of the graphs of a polynomial function. Students will then practice graphing them by hand. Students will use the "Think-Pair-Share" method to compare their answers.	
T, M, A	● Teacher will review long division with numbers to then model long division with polynomials. Synthetic division will then also be modeled. Teacher will make a connection to division of polynomials and whether or not a polynomial is a factor. The Remainder and Factor Theorems will be introduced and the teacher will lead students through the process of determining the remainder of the division of two polynomials, and whether a polynomial is a factor.	
M, A	● Students will work as a class or in pairs to practice long and synthetic division and to use that division to determine the remainder. Students will apply the Factor Theorem to determine if a polynomial is a factor of a larger degree polynomial. Student work will be discussed orally as a group.	
T, M, A	● Teacher will give a warm up question that reviews the domain of a rational function. This will lead into the concept of asymptotes for the graph of the rational function. Teacher will model the key components of vertical, horizontal, and slant asymptotes and how to use intercepts to determine the general shape of the graph.	

A M, A	● Students will be placed in teacher created groups to graph rational functions. After students have mastered one or two, students will work independently on white boards or at the chalkboard graphing other rational functions. ● Students will produce an authentic graph of a unique rational functions All Resources and materials must adhere to all New Milford Board of Education policies and regulations and are subject to New Milford Board of Education approval. Resources and materials must be researched and vetted by the writers and department heads prior to submission for approval. ● Textbook: Blitzer, Robert. Precalculus Second Edition, Upper Saddle River, NJ: Pearson, 2004. ● Supplemental activities from the textbook resources ● Teacher-made supplemental activities on applications, performance tasks, and chapter review ● Graphing calculator TI Emulator software. ● On-line resources such as YouTube, Khan Academy, Desmos, EdPuzzle, Kahoot, etc.	

Unit 5: Exponential and Logarithmic Functions (Chapter 3)

ESTABLISHED GOALS

- **CC.9-12.F.IF.7e** Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.
- **CC.9-12.F.BF.1** Write a function that describes a relationship between two quantities.*
- **CC.9-12.F.BF.5** (+) Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents
- **CCSS.Math.Practice.MP 2** Reason abstractly and quantitatively.
- **CCSS.Math.Practice.MP 5** Use appropriate tools strategically.
- **CCSS.Math.Practice.MP 6** Attend to precision

Transfer

Students will be able to independently use their learning to…

- Analyze a problem and apply the appropriate techniques to simplifying expressions
- Reason abstractly
- Justify their reasoning or understanding by explaining
- Attend to precision when making mathematical statements

Meaning

UNDERSTANDINGS

Students will understand that…

- Exponential equations can be solved by getting a common base or by using logarithms.
- Logarithms are used to represent exponents, which could not be solved.
- Properties of logarithms relate to the properties of exponents.

ESSENTIAL QUESTIONS

Students will keep considering…

- What is the value of an exponential equation in the real world?
- What does a logarithm represent?
- How does the relationship between exponential and logarithmic functions help us?

Acquisition

Students will know…

- Exponential equations can be solved by getting a common base and by using logarithms

Students will be skilled at…

- Changing expressions to have the same base in order to solve exponential equations.

	● A logarithm is a way to represent exponents ● There are properties of logarithms that are related to the properties of exponents ● Common logarithms are logs with a base of 10 and can be used to solve exponential equations ● Natural logarithms have base e, which is a special irrational number used in exponential growth ● Key Terms: exponent, exponential equation, base, logarithm, common logarithm, e, natural logarithm	● Changing expressions from exponential form to logarithmic form, and vice-versa. ● Evaluating logarithmic expressions. ● Applying the properties of logarithm to solve logarithmic equations. ● Using common logarithms to solve exponential equations that do not have a common base. ● Identifying a natural logarithm as log base e.

STAGE 2

Code	Evaluative Criteria	Assessment Evidence
T, M, A	Evaluative Criteria consists of ● The steps are shown with work and explanation from photomath on the first set, using the notes on the second set, and completed independently by the student on the third set. ● Analysis contains reflection on the effectiveness of the photomath app ● Work is clear, correct, and neat.	PERFORMANCE TASK(S): *Students will show that they really understand evidence of…* Goal: To utilize the Photomath app as a means to learn how to solve exponential equations Role: Member of focus group for the programmers of the Photomath app Audience: Programming department Situation: Students are given 4 exponential equations to first solve using the Photomath app. They are to write the steps down, then use those examples to solve 4 new equations. After that they will attempt to solve 4 additional equations without the use of any notes of examples. They will then give input to the programmers about the effectiveness of the directions given in the app. Product: Students will present their work and an analysis of the photomath app as related to this topic

A, M A, M A, M T, A, M	Evaluative Criteria consists of ● Is the correct method used to solve the problem ● Is the analysis of the problem accurate ● Is the mathematics completed correctly ● Are students using correct mathematical terminology	OTHER EVIDENCE: ● Alternative assessment projects such as posters, drawings, pictures and real world applications ● Review of standardized test questions to prep students for the challenge of the SAT and college placement tests ● Performance tasks modeling real world and application problems ● Quizzes ● Unit Test - to include a variety of DOK level problems and may include SAT style problems.

Code	***Pre-Assessment***	
T, M **T, M, A**	● Teacher checks for prerequisite skills and prior knowledge via warm-up and questioning activities, such as properties of exponents, and solving various equations ● Prerequisite knowledge will be reviewed as it is incorporated into topics both in class and on review assignments	
	Summary of Key Learning Events and Instruction *Student success at transfer meaning and acquisition depends on…*	Progress Monitoring
T, M	● Teacher will use independent/guided practice via supplemental worksheets to review simplifying expressions with exponents. Teacher will walk around and monitor student progress, assist individual students, and will model examples when needed for the class.	● Warm up questions
T, M, A	● Students will work independently and in teacher created groups to complete practice problems that review exponents. Students will use “think-pair-share” to compare and discuss their answers.	● Monitoring class work through board work, group work, questioning, and walk-arounds
T, M,A	● Teacher will give a warm-up question on exponents as a way to lead in to solving exponential equations. Teacher will model different examples of exponential equations that have the same base and the process to solving them.	● Check for understanding via going over homework and medium such as reflections and exit tickets
M, A	● Students will complete problems on solving exponential equations. Students will volunteer their solutions, and will explain the process they used.	● Class worksheets with direct teacher observation or self assessment
T, M	● Teacher will have class graph the equation $y = 2^x$ and its inverse as a way of introducing the graph of an exponential equation and a logarithm.	● Practice on whiteboard/chalkboard with direct teacher observation
T, M	● Teacher will model how to solve and evaluate logarithmic equations and expressions by changing to exponential form and by applying the properties of logarithms.	● Kahoot quizzes with review questions and direct teacher observation
T, M, A	● Students will practice evaluating and solving logarithmic expressions and equations by various activities such as independent practice, board work, think-pair-share and/or use of white boards.	● Google form or other review assignments ● Homework assignments with direct teacher observation or self assessment ● Differentiate through purposeful or flexible grouping, use of diagrams and explanations to demonstrate understanding and active

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Unit 6: Trigonometric Functions (chapter 4)

ESTABLISHED GOALS

- **CC.9-12.G.SRT.8** Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.*
- **CC.9-12.F.TF.1** Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle.
- **CC.9-12.F.TF.2** Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle.
- **CC.9-12.F.TF.3 (+)** Use special triangles to determine geometrically the values of sine, cosine, tangent for $\pi/3$, $\pi/4$ and $\pi/6$, and use the unit circle to express the values of sine, cosine, and tangent for $\pi - x$, $\pi + x$, and $2\pi - x$ in terms of their values for x, where x is any real number.
- **CC.9-12.F.TF.5** Choose trigonometric functions to model periodic phenomena

Transfer

Students will be able to independently use their learning to…

- Analyze a problem and apply the appropriate techniques to simplifying expressions
- Reason abstractly
- Justify their reasoning or understanding by explaining
- Attend to precision when making mathematical statements

Meaning

UNDERSTANDINGS

- Right triangle trigonometry has many uses and applications
- The unit circle can represent angles of any measure, in degrees or radians, and is cyclic.
- Trigonometric functions of specific angles relate to specific points and values on the unit circle.
- Graphs of the trigonometric functions are cyclic, with certain traits. Sine and cosine graphs produce “waves”.

ESSENTIAL QUESTIONS

- How can the use of right triangles, trigonometric functions, and the Pythagorean Theorem be used to solve real world problems?
- What is the unit circle and why is it important in trigonometry?
- Why do the graphs of trigonometric functions look the way they do?
- How do the graphs of sine and cosine apply to real life applications?
- What are the uses of inverse trigonometric functions?

Acquisition

Students will know…

Students will be skilled at…

with specified amplitude, frequency, and midline.* • **CC.9-12.F.TF.6 (+)** Understand that restricting a trigonometric function to a domain on which it is always increasing or always decreasing allows its inverse to be constructed. • **CCSS.Math.Practice.MP 2** Reason abstractly and quantitatively. • **CCSS.Math.Practice.MP 5** Use appropriate tools strategically. • **CCSS.Math.Practice.MP 6** Attend to precision •	• The Pythagorean Theorem is a way to solve for a missing side in a right triangle, when given the other two sides • The six trigonometric functions: sine, cosine, tangent, cosecant, secant, and cotangent and the relationships to the sides in a right triangle • Radian measures express angles in terms of the arc length on the unit circle • The special angles,points, and trigonometric values on the unit circle • Reference angles help to find trig values in the second, third and fourth quadrants • The methods to graphing sine, cosine, tangent, cosecant, and secant, and their general behaviors and critical values • Inverse trigonometric functions can be used to solve for missing angles and have restrictions on their ranges in order to maintain them as a function • Compositions of trigonometric and inverse functions • Key Terms: Pythagorean Theorem, sine, cosine, tangent, cosecant, secant, cotangent, radian, degree, coterminal, complementary, supplementary, unit circle, angle in standard position, cyclic, reference angle, amplitude, period, phase shift, vertical shift, inverse trigonometric functions	• Using the Pythagorean Theorem and right triangle trigonometry to solve right triangles • Defining the six trigonometric functions • Constructing a unit circle and identify angles in both degree and radian measures • Converting degrees to radians (and vice versa) • Identifying specific points on the unit circle • Defining the trigonometric functions as related to the x and y coordinate and radius on the unit circle • Using reference angles and definitions of the trigonometric functions to find the specific values on the unit circle. • Filling in the trigonometric table for values of special and quadrantile angles • Graphing Sine, Cosine, Tangent, Cosecant, and Secant functions, and identify special characteristics such as amplitude, period, phase shift, and vertical shift • Identifying the domain and range of inverse trigonometric functions • Finding the exact values of inverse trigonometric functions and composite trigonometric functions • Using graphing calculators to check graphs of trigonometric values, and to find approximate solutions to problems

Code	Evaluative Criteria	Assessment Evidence
	Further information: Evaluative Criteria consists of	PERFORMANCE TASK(S): Performance Task #1:
T, M, A	● A completed product with correct work clearly shown ● Analysis of which trigonometric functions should be used for each problem ● Answers make sense in the context of the problem	Goal: To use right triangle trigonometry to solve real-world application problems Role: Surveyor Audience: Land development company Situation: Given various situations, you are to calculate unknown distances to report back to the land development company for construction purposes Product: Calculated distances with work shown
		Performance Task #2:
T, M, A	Evaluative Criteria consists of ● A personal biorhythm that is neat, organized, and well presented ● Correct calculations of age in days, and starting, ending, and critical values of each sine curve ● A key is provided for which graph is intellectual, emotional, and physical ● Argument of expected performance is accurate and supported by the graphs	Goal: To calculate your personal biorhythm chart for the current month. Role: Social scientist Audience: School staff Situation: You are to convince school staff whether or not your personal academic performance will be stronger or weaker based on your biorhythm Product: Your completed biorhythm

A, M A, M A, M T, M, A	Evaluative Criteria consists of ● Is the correct method used to solve the problem ● Is the analysis of the problem accurate ● Is the mathematics completed correctly ● Are students using correct mathematical terminology	OTHER EVIDENCE: ● Alternative assessment projects such as posters, drawings, pictures and real world applications ● Review of standardized test questions to prep students for the challenge of the SAT and college placement tests ● Performance tasks modeling real world and application problems ● Quizzes ● Unit Test - to include a variety of DOK level problems and may include SAT style problems.

Code	***Pre-Assessment***	
T, M **T, M, A**	● Teacher checks for prerequisite skills and prior knowledge via warm-up and questioning activities, such as properties of right triangles and basics of graphing ● Prerequisite knowledge will be reviewed as it is incorporated into topics both in class and on review assignments	
	Summary of Key Learning Events and Instruction *Student success at transfer meaning and acquisition depends on…*	Progress Monitoring
T, M, A	● Teacher will review the Pythagorean Theorem and right triangle trigonometry. Teacher will give review and practice problems as classwork on finding missing sides and angles. Lesson will lead into the introduction of the three reciprocal trigonometric functions, and applications of trigonometry will be discussed.	● Warm up questions ● Monitoring class work through board work, group work, questioning, and walk-arounds
T, M, A	● Students practice solving right triangles using trigonometry by working in teacher created groups. Students will also identify the values of the reciprocal functions, and will use their calculators to find specific values.	● Check for understanding via going over homework and medium such as reflections and exit tickets
T, M, A	● Teacher will introduce the concept of the Unit Circle by first discussing radian measure as a representation of the length of the arc on the circle. Teacher will lead class through the discovery of the relationship between degrees and radians and how to convert degrees to radians and radians to degrees.	● Class worksheets with direct teacher observation or self assessment ● Practice on whiteboard/chalkboard with direct teacher observation ● Kahoot quizzes with review questions and direct teacher observation
M, A	● Students will work independently on changing measures from degrees to radians and radians to degrees. Students may collaborate with a partner on their solutions.	● Google form or other review assignments
T, M, A	● Teacher will continue to demonstrate the relations on the Unit Circle to points on the circle and angle measures. After a review of special right triangles, teacher will model how to find specific points given particular reference angles.	● Homework assignments with direct teacher observation or self assessment
M, A	● Students will complete the Unit Circle chart with specific degree measure, radian measure, and the coordinate of	● Differentiate through purposeful or flexible grouping, use of diagrams and explanations to demonstrate understanding and active

	the associated points. Students will then use the Unit Circle and reference angles to fill in the trigonometric table.	lessons involving discovery, scaffolding, jigsaw activities and use of hands-on manipulatives
M, A	● Teacher will prepare materials (garland, laminated color coded cards with degree measures, radian measures, and coordinates of points) for the Unit Circle activity where students physically construct a model of the Unit Circle.	● Summative assessments Quizzes Unit test
M, A	● Students will work cooperatively as a group to construct the Unit Circle in the rotunda using garland and laminated values on the circle. Students will then play the "move it" game where they must move to a specific value on the circle.	
T, M, A	● Teacher will review the relationships of trigonometric functions in right triangles and then show the connection with the x, y, and r values of the Unit Circle. Lesson will later lead into applications of the trigonometric functions to any point in the coordinate plane, which the teacher will model and explain.	
T, M, A	● Students will apply the definitions of the trigonometric functions to the Unit Circle. Students will then find the values of the trigonometric functions at any value.	
T, M, A	● With help of the graphing calculator, teacher will lead class through graphing the sine and cosine curves. Discussion on the general shape of the curves, their periodic behavior, and their amplitude, period, phase shift and vertical shift will occur. Teacher will lead class through examples on how to graph sine and cosine functions.	
M, A	● Students will work at the board to practice graphing sine and cosine functions, identifying the amplitude, period, phase shift and vertical shift.	
M, A	● Teacher will have class make a t-table to graph the tangent curve. The general shape of the curve, and its period will be discussed. Teacher will then model how to graph the secant and cosecant functions by using the sine and cosine graphs as "helpers".	
M, A	● Students will graph y=tanx as well as various cosecant and secant curves by working in teacher created groups.	

T, M, A M, A T, M, A	● Teacher will model how to use the graphing calculator and trigonometric table to find approximated and exact values of inverse trigonometric functions. Teacher will also explain how to find composite trigonometric values. ● Students will work in pairs to find inverse and composite trigonometric functions using their calculators and the trigonometric table. ● Teacher will determine cooperative groups for various activities during this unit All Resources and materials must adhere to all New Milford Board of Education policies and regulations and are subject to New Milford Board of Education approval. Resources and materials must be researched and vetted by the writers and department heads prior to submission for approval. ● Textbook: Blitzer, Robert. Precalculus Second Edition, Upper Saddle River, NJ: Pearson, 2004. ● Supplemental activities from the textbook resources ● Teacher-made supplemental activities on applications, performance tasks, and chapter review ● Graphing calculator TI Emulator software. ● On-line resources such as YouTube, Khan Academy, Desmos, EdPuzzle, Kahoot, etc.	

Unit 7: Law of Sines and Cosines (Chapter 6)

<table>
<tr><td rowspan="6">ESTABLISHED GOALS
● CC.9-12.G.SRT.11 (+)Understand and apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g., surveying problems, resultant forces).
● CC.9-12.N.Q.3 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities
● CCSS.Math.Practice.MP 2 Reason abstractly and quantitatively.
● CCSS.Math.Practice.MP 5 Use appropriate tools strategically.
● CCSS.Math.Practice.MP 6 Attend to precision</td><td colspan="2">Transfer</td></tr>
<tr><td colspan="2">Students will be able to independently use their learning to…
● Analyze a problem and apply the appropriate techniques to simplifying expressions
● Reason abstractly
● Justify their reasoning or understanding by explaining
● Attend to precision when making mathematical statements</td></tr>
<tr><td colspan="2">Meaning</td></tr>
<tr><td>UNDERSTANDINGS
Students will understand that…
● The Law of Sines and Law of Cosines apply to non-right triangles and can be used to find missing lengths or angles</td><td>ESSENTIAL QUESTIONS
Students will keep considering…
● How can the use of trigonometric functions be extended to solve word problems and triangles with no right angles?</td></tr>
<tr><td colspan="2">Acquisition</td></tr>
<tr><td>Students will know…
● The Law of Sines is used to solve an oblique triangle where a side and angle opposite that side are given
● The ambiguous case of the Law of Sines occurs with the“Agles-Side-Side” case, and can result in zero, one or two triangle solutions</td><td>Students will be skilled at…
● Solving a triangle for missing sides or angles using the Law of Sines and the Law of Cosines
● Applying the ambiguous case of the Law of Sines to determine if there are no, one or two possible triangles.</td></tr>
</table>

	● The Law of Cosines is used to solve an oblique triangle when 3 sides or 2 sides and an included angle are given ● Real world applications for the use of the Law of Sines and Law of Cosines ● Key Terms: Law of Sines, Law of Cosines, oblique triangle, ambiguous case	

STAGE 2

Code	Evaluative Criteria	Assessment Evidence
T, M, A	Evaluative Criteria consists of ● Presentation is neat, clear, with appropriate work shown ● Correct formulas are used for each problem, and solutions are also correct ● Solutions make sense in context of the problem	PERFORMANCE TASK(S): *Students will show that they really understand evidence of…* Goal: To find unknown values in specific real-world situations Role: Surveyor Audience: Manager of a development company Situation: Given various situations, use the Laws of Sines and Cosines to calculate values that are otherwise un-measurable (example – calculate the distance between two landmarks that have a lake between them). Product: Presentation (poster, slides, etc) of calculated distances with solutions shown

A, M A, M A, M T, A, M	Evaluative Criteria consists of ● Is the correct method used to solve the problem ● Is the analysis of the problem accurate ● Is the mathematics completed correctly ● Are students using correct mathematical terminology	OTHER EVIDENCE: *Students will show they have achieved Stage 1 goals by…* ● Alternative assessment projects such as posters, drawings, pictures and real world applications ● Review of standardized test questions to prep students for the challenge of the SAT and college placement tests ● Performance tasks modeling real world and application problems ● Quizzes ● Unit Test - to include a variety of DOK level problems and may include SAT style problems.

Code	*Pre-Assessment*	
T, M **T, M, A**	● Teacher checks for prerequisite skills and prior knowledge via warm-up and questioning activities, such as properties of triangles, order of operations, and cross multiplication ● Prerequisite knowledge will be reviewed as it is incorporated into topics both in class and on review assignments	
	Summary of Key Learning Events and Instruction *Student success at transfer meaning and acquisition depends on…*	Progress Monitoring
T, A, M A, M A, M A, M T, A, M A, M T, A, M	● Teacher will introduce Law of Sines by having students solve a right triangle. Discussion will take place about solving a non right triangle, and teacher will give the formula for the Law of Sines and model some examples. Teacher will explain the cases when the Law of Sines can be used (AAS, ASA, SSA). ● Students will work as a whole group to practice some examples on the Law of Sines (non ambiguous case). ● Teacher will go over the ambiguous case for the Law of Sines and demonstrate why there are possibly no triangles, 1 triangle, or 2 triangles. Teacher will model examples with no triangle and 2 triangles. ● Students will practice examples of the ambiguous case of the Law of Sines by working in small teacher created groups. ● Teacher will give the formula for the Law of Cosines and discuss when to use it (SSS, SAS cases). Teacher will model an example where a side should be found first, and then one where an angle should be found first. ● Students will solve triangles using the Law of Cosines, and will compare their answers with a partner. ● Students will work independently to complete the performance task related to applications with the Law of Sines and Law of Cosines.	● Warm up questions ● Monitoring class work through board work, group work, questioning, and walk-arounds ● Check for understanding via going over homework and medium such as reflections and exit tickets ● Class worksheets with direct teacher observation or self assessment ● Practice on whiteboard/chalkboard with direct teacher observation ● Kahoot quizzes with review questions and direct teacher observation ● Google form or other review assignments ● Homework assignments with direct teacher observation or self assessment ● Differentiate through purposeful or flexible grouping, use of diagrams and explanations to demonstrate understanding and active

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