Course Title:	Content Area:	Grade Level:	Credit (if applicable)
ACC Grade 7 Mathematics: Bridge to Algebra	Mathematics	7	

Course Description:

This accelerated mathematics course blends the priority content of grades 7 and 8 into one course. The Bridge course is aligned with the College and Career Ready Standards for seventh grade and eighth grade. In this course students develop a coherent understanding of grade level major works and build fluency with the real number system focusing on rational numbers. Students use linear equations to analyze, represent, and solve problems related to data distributions. They apply knowledge from previous mathematics courses to work in preparation for concepts that will begin in Algebra 1. Application is emphasized.

Aligned Core Resources:	Connection to the <u>BPS Vision of the Graduate</u>
Kendall Hunt Illustrative Mathematics Workbook	 CRITICAL THINKING AND PROBLEM SOLVING Collect, assess and analyze relevant information Reason effectively. Use systems thinking Make sound judgments and decisions. Identify, define and solve authentic problems and essential questions. Reflect critically on learning experience, processes and solutions. Transfer knowledge to other situations.
Additional Course Information: Knowledge/Skill Dependent courses/prerequisites	Link to <u>Completed Equity Audit</u>
Standard Matrix	·

Standard Matrix

Aligned Lessons	Standards
Acc6.5.9, Acc6.7.15, Acc6.7.19	7.EE.A
Acc6.6.1, Acc7.4.7, Acc7.4.8, Acc7.4.9, Acc7.4.10, Acc7.4.11	7.EE.A.1
Acc7.3.12	7.EE.A.2
Acc7.3.1, Acc6.7.14, Acc6.7.19	7.EE.B
Acc6.5.20, Acc6.7.17, Acc6.7.22, Acc7.3.2, Acc7.3.3, Acc7.3.4, Acc7.3.5Acc7.3.6, Acc7.3.11, Acc7.3.12	7.EE.B.3
Acc6.7.19, Acc6.7.20. Acc7.3.1,Acc7.3.2, Acc7.3.3,Acc7.3.5,Acc7.3.9, Acc7.3.11, Acc7.3.12, Acc7.3.13, Acc7.4.5	7.EE.B.4
Acc6.7.16,Acc6.7.19,Acc6.7.20, Acc7.3.1, Acc7.3.4Acc7.3.5, Acc7.3.6, Acc7.3.7, Acc7.3.8, Acc7.3.9, Acc7.3.10, Acc7.3.11, Acc7.3.12	7.EE.B.4.a
Acc7.4.4, Acc7.4.5, Acc7.4.6	7.EE.B.4.b
Acc7.8.11	8.EE.A

Acc7.8.1, Acc7.8.2, Acc7.8.3, Acc7.8.4, Acc7.8.8, Acc7.8.10	8.EE.A.2
Acc7.5.1, Acc7.5.3, Acc7.5.4, Acc7.5.5, Acc7.5.6, Acc7.5.7, Acc7.5.8, Acc7.5.9, Acc7.5.10	8.EE.B
Acc7.5.1, Acc7.5.3, Acc7.5.5	8.EE.B.5
Acc7.2.15, Acc7.2.16, Acc7.2.17, Acc7.5.6Acc7.5.9, Acc7.5.25	8.EE.B.6
Acc7.4.12, Acc7.4.13, Acc7.4.17, Acc7.5.10Acc7.5.11,	8.EE.C
Acc7.4.12, Acc7.4.13, Acc7.4.14, Acc7.4.17	8.EE.C.7
Acc7.4.15, Acc7.4.16	8.EE.C.7.a
Acc7.4.14	8.EE.C.7.b
Acc7.4.17,Acc7.5.11, Acc7.5.12, Acc7.5.13,Acc7.5.14, Acc7.5.15,Acc7.5.16	8.EE.C.8
Acc7.5.11, Acc7.5.13, Acc7.5.14, Acc7.5.25	8.EE.C.8.a
Acc7.5.13Acc7.5.16,	8.EE.C.8.b
Acc7.5.16, Acc7.5.26	8.EE.C.8.c
Acc6.5.14, Acc6.5.20, Acc7.2.1, Acc7.2.2, Acc7.2.3, Acc7.2.4, Acc7.2.5, Acc7.2.6, Acc7.2.7, Acc7.2.18	7.G.A.1
Acc7.6.26, Acc6.5.11	7.G.A.2
Acc7.6.11, Acc7.6.15	7.G.A.3
Acc6.5.14, Acc7.6.17	7.G.B
Acc6.5.10	7.G.B.4
Acc6.5.10	7.G.B.4
Acc6.5.10, Acc6.5.12, Acc6.5.15,, Acc6.5.19, Acc6.5.20	7.G.B.4
Acc7.3.13, Acc7.Acc7.2.61.12	7.G.B.5
Acc6.5.5, Acc6.5.14, Acc7.6.11, Acc7.6.14, Acc7.6.15, Acc7.6.16, Acc7.6.17Acc7.6.26,	7.G.B.6
Acc7.1.18, Acc7.2.8, Acc7.2.9, Acc7.2.10, Acc7.2.16, Acc7.2.17	8.G.A
Acc7.1.1, Acc7.1.2, Acc7.1.3, Acc7.1.5, Acc7.1.10, Acc7.1.12, Acc7.2.13, Acc7.5.7	8.G.A.1
Acc7.1.6, Acc7.1.7, Acc7.1.8, Acc7.1.9, Acc7.1.11	8.G.A.1.a
Acc7.1.6, Acc7.1.7, Acc7.1.8, Acc7.1.9	8.G.A.1.b
Acc7.1.7, Acc7.1.8	8.G.A.1.c
Acc7.1.10, Acc7.1.11, Acc7.1.13, Acc7.2.11, Acc7.2.12	8.G.A.2
Acc7.1.4, Acc7.1.5, Acc7.2.10, Acc7.2.17	8.G.A.3
Acc7.2.11, Acc7.2.12, Acc7.2.19	8.G.A.4
Acc7.1.12, Acc7.1.13, Acc7.1.14, Acc7.2.13Acc7.2.19,	8.G.A.5
Acc7.8.1, Acc7.8.5Acc7.8.7,	8.G.B
Acc7.1.14, Acc7.8.1, Acc7.8.5, Acc7.8.6, Acc7.8.7	8.G.B.6
Acc7.8.5, Acc7.8.6, Acc7.8.8, Acc7.8.13	8.G.B.7
Acc7.8.9	8.G.B.8

Acc7.6.12, Acc7.6.13Acc7.6.21, Acc7.6.23, Acc7.6.24	8.G.C
Acc7.6.18, Acc7.6.19, Acc7.6.20, Acc7.6.21, Acc7.6.22, Acc7.6.23, Acc7.6.24, Acc7.6.25,	8.G.C.9
Acc6.7.18	7.NS.A
Acc6.7.6, Acc6.7.8, Acc6.7.9, Acc6.7.10	7.NS.A.1,,
Acc6.7.6, Acc6.7.7	7.NS.A.1.a
Acc6.7.6,Acc6.7.7	7.NS.A.1.b
Acc6.7.7, Acc6.7.9, Acc6.7.10	7.NS.A.1.c,
Acc6.7.7	7.NS.A.1.d
Acc6.7.14, Acc6.7.16,	7.NS.A.2
Acc6.7.14	7.NS.A.2.a
Acc6.7.16	7.NS.A.2.b
Acc6.7.14	7.NS.A.2.c
Acc6.7.10Acc6.7.17, Acc6.7.18, Acc6.7.19Acc6.7.20,	7.NS.A.3

Unit Links

If unit headings are formatted as a heading, then we can link a Table of Contents to better organize and provide faster access to each unit

Unit 1-Proportional Relationships (ACC 6, Unit 5)

Unit 2-Percentage Increase and Decrease (ACC 6, Unit 6)

Unit 3-Rational Numbers (ACC 6 Unit 7)

Unit 4-Writing and Solving Equations (ACC 7, Unit 3)

Unit 5-Inequalities, Expressions, and Equations (ACC 7 Unit 4)

Unit 6-Rigid Transformations and Congruence (ACC 7, Unit 1)

Unit 7-Scale Drawings, Similarity, and Slope (ACC 7, Unit 2)

Unit 8-Linear Relationships (ACC 7, Unit 5)

Unit 9-Functions and Volume (ACC 7, Unit 6)

Unit 10-Pythagorean Theorem and Irrational Numbers (ACC 7, Unit 8)

Course Assessment Map

Unit 1-Proportional Relationships (ACC 6, Unit 5)

Relevant Standards: Bold indicates priority

Lesson	Standard
Acc6.5.2	7.RP.A, 7.RP.A.2, 7.RP.A.2.b, 7.RP.A.2.c
Acc6.5.3	7.RP.A.2, 7.RP.A.2.c
Acc6.5.4	7.RP.A.1, 7.RP.A.2
Acc6.5.5	7.G.B.6, 7.RP.A.1, 7.RP.A.2
Acc6.5.6	7.RP.A, 7.RP.A.2
Acc6.5.7	7.RP.A, 7.RP.A.2, 7.RP.A.2.a
Acc6.5.8	7.RP.A.1, 7.RP.A.2
Acc6.5.9	7.EE.A, 7.RP.A.2
Acc6.5.10	7.G.B.4, 7.RP.A.2.a, 7.RP.A.3
Acc6.5.11	7.G.A, 7.G.A.2, 7.G.B.4
Acc6.5.12	7.G.B.4, 7.RP.A.2, 7.RP.A.2.a
Acc6.5.13	7.G.B.4
Acc6.5.14	7.G.A.1, 7.G.B, 7.G.B.6
Acc6.5.15	7.G.B.4, 7.RP.A.2.a
Acc6.5.16	7.G.B.4
Acc6.5.17	7.RP.A, 7.RP.A.2
Acc6.5.18	7.RP.A.2
Acc6.5.19	7.G.B.4
Acc6.5.20	7.EE.B.3, 7.G.A.1, 7.G.B.4

Unit Narrative

In this unit, students learn to understand and use the terms "proportional," "constant of proportionality," and "proportional relationship," and recognize when a relationship is or is not proportional. They represent proportional relationships with tables, equations, and graphs. Students use these terms and representations in reasoning about situations that involve constant speed, unit pricing, and measurement conversions. Then, special focus is given to circumference and area of circles as examples of proportional and nonproportional relationships, respectively. Students informally derive the formulas for circumference and area of a circle and are introduced to the value π .

Demonstration of Learning:	Pacing for Unit
CFA 1: Lesson 3 CFA 2: Lesson 7 CFA 3: Lesson 16 EoU: Version B	18 Days
Family Overview (link below)	Integration of Technology:
Proportional Relationships	Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Area, base, circle, coefficient, compose, constant of proportionality, coordinate plane, cubed, decompose, dependent variable, diameter, double number line, equivalent expressions, equivalent ratios, exponent, face, height, independent variable, long division, net, opposite vertex, origin, parallelogram, per, percent, percentage, pi, polygon, polyhedron, prism, proportional relationship, pyramid, quadrilateral, radius, ratio,	DESMOS Edulastic
Connections to Prior Units:	Connections to Future Units:
ACC 6, Unit 1; ACC 6, Unit 4	ACC 6, Unit 6
Differentiation through <u>Universal Design for Learning</u>	
UDL Indicator	Teacher Actions:
Comprehension: Highlight patterns, critical features, big ideas, and relationships	 Highlight or emphasize key elements in text, graphics, diagrams, formulas Use multiple examples and non-examples to emphasize critical features Use cues and prompts to draw attention to critical features Highlight previously learned skills that can be used to solve unfamiliar problems
Supporting Multilingual/English Learners	
Related CELP standards:	Learning Targets:
An ML can construct grade appropriate oral and written claims and support them with reasoning and evidence.	All targets apply and require reasoning with evidence.
Lesson Learning Target Sequence	Success Criteria/ Assessment/Resources

1 (lessons 1-3)	I can compare approaches to solving problems involving proportional relationships.	 I can write an equation of the form y=kx to represent a proportional relationship described by a table or a story. I can write the constant of proportionality as an entry in a table. I can find two constants of proportionality for a proportional relationship. I can write two equations representing a proportional relationship described by a table or story. I can find missing information in a proportional relationship using the constant of proportional relationship using the constant of proportionality. I can relate all parts of an equation like y=kx to the situation it represents.
2 (lessons 4-6)	I can compare proportional relationships to nonproportional relationships. (Lessons 4-5) I can identify the relationship between variables in a given situation as proportional. (Lesson 6)	 I can decide if a relationship represented by a table could be proportional and when it is definitely not proportional. I can decide if a relationship represented by an equation is proportional or not. I can ask questions about a situation to determine whether two quantities are in a proportional relationship. I can solve all kinds of problems involving proportional relationships.
3 (lessons 7-9)	I can compare descriptions, tables, equations, and graphs representing the same situations. I can compare graphs of proportional relationships.	 I can find the constant of proportionality from a graph. I know that the graph of a proportional relationship lies on a line through (0,0). I can compare two, related proportional relationships based on their graphs. I know that the steeper graph of two proportional relationships has a larger constant of proportionality. I can interpret a graph of a proportional relationship using the situation. I can write an equation representing a proportional relationship from a graph.

4 (lessons 10-13)	I can describe the relationships between circumference and diameter that are always true. (Lessons 10-13)	 I can examine quotients and use a graph to decide whether two associated quantities are in a proportional relationship. I understand that it can be difficult to measure the quantities in a proportional relationship accurately. I can describe the characteristics that make a shape a circle. I can identify the diameter, center, radius, and circumference of a circle. I can describe the relationship between circumference and diameter of any circle. I can explain what pi means/represents. I can choose an approximation for pi based on the situation or problem. If I know the radius, diameter, or circumference of a circle, I can find the other two.
5 (lessons 15-16) *SKIP lesson 14	I can compare the relationships of diameters and circumferences to diameters and areas. (lesson 15) I can justify reasoning about areas of curved figures. (lesson 16)	 I know the formula for the area of a circle. I know whether or not the relationship between the diameter and area of a circle is proportional and can explain how I know. I can calculate the area of more complicated shapes that include fractions of circles. I can write exact answers in terms of pi.
6 (lessons 17-20) *SKIP lesson 19	I can justify whether or not a relationship is proportional. (lesson 17-18) I can justify my understanding of area and circumference of circles to solve more complicated real world problems. (lesson 20)	 I can make connections between the graphs, tables, and equations of a proportional relationship. I can use units to help me understand information about proportional relationships. I can answer a question by representing a situation using proportional relationships. I can decide whether a situation about a circle has to do with area or circumference. I can use formulas for circumference and area of a circle to solve problems. I can apply my understanding of area and circumference of circles to solve more complicated problems.

Unit 2-Percentage Increase and Decrease (ACC 6, Unit 6)

Lesson	Standards
Acc6.6.1	7.EE.A.1, 7.RP.A.2, 7.RP.A.3
Acc6.6.2	7.NS.A.2.d, 7.RP.A.2, 7.RP.A.3
Acc6.6.3	7.RP.A.3
Acc6.6.4	7.RP.A.3
Acc6.6.5	7.RP.A.3
Acc6.6.6	7.RP.A.3
Acc6.6.7	7.RP.A.3
Acc6.6.8	7.RP.A.3
Acc6.6.9	7.RP.A.3
Acc6.6.10	7.RP.A.3
Acc6.6.11	7.RP.A.3
Acc6.6.12	7.RP.A.3

Demonstration of Learning:	Pacing for Unit
CFA 1: Lesson 4 CFA 2: Lesson 8 CFA 3: Lesson 10 EoU: Version A	
Family Overview (link below)	Integration of Technology:
Percentage Increase and Decrease	Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Area, base, (triangle), base (prism), circle, circumference, coefficient, compose, constant of proportionality, coordinate plane, cubed, decompose, dependent variable, diameter, double number line diagram, equivalent expressions, equivalent ratios, exponent,	DESMOS Edulastic

face, height, independent variable, long division, measurement error, net, opposite vertex, origin,parallelogram, perpercent, percent error, percentage, percentage decrease, percentage increase, pi, polygon, polyhedron, prism, proportional relationship, pyramid, quadrilateral, radius, ratio, reciprocal, region, repeating decimal, same rate, solution to an equation, squared, surface area, table, tape diagram, term, unit price, unit rate, variable		
Connections to Prior Units:		Connections to Future Units:
ACC 6, Unit 5		ACC 6, Unit 8
Differentiatio	on through <u>Universal Design for Learning</u>	
UDL Indicato	r	Teacher Actions:
Comprehension: Highlight patterns, critical features, big ideas, and relationships		 Highlight or emphasize key elements in text, graphics, diagrams, formulas Use multiple examples and non-examples to emphasize critical features Use cues and prompts to draw attention to critical features Highlight previously learned skills that can be used to solve unfamiliar problems
Supporting N	Iultilingual/English Learners	
Related CEL	<u>Standards:</u>	Learning Targets:
	nstruct grade appropriate oral and written pport them with reasoning and evidence.	All italicized targets and their related success criteria.
Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
1 (lessons 1-2)	I can generate an algebraic expression that represents a situation involving adding or subtracting a fraction or a decimal of the initial value.	 I can use the distributive property to rewrite an expression like x+1/2 x as (1+1/2)x. I understand that "half as much again" and "multiply by 3/2" mean the same thing. I can use the distributive property to rewrite an equation like x+0.5x=1.5x. I can write fractions as decimals. I understand that "half as much again" and "multiply by 1.5" mean the same thing.
2	I can calculate and explain percent	•I can draw a tape diagram that represents a

3-6)	I can interpret concrete problems involving percent increase and decrease (Lesson 4). I can represent situations involving percent increase and decrease (Lesson 5-6).	 When I know the starting amount and the percent increase or decrease, I can find the new amount. (L3) I can use a double number line diagram to help me solve percent increase and decrease problems. (4) I understand that if I know how much a quantity has grown, then the original amount represents 100%. (4) When I know the new amount and the percentage of increase or decrease, I can find the original amount. (4) I can solve percent increase and decrease problems by writing an equation to represent the situation and solving it. (5) I can find percentages of quantities like 12.5% and 0.4%. (6) I understand that to find 0.1% of an amount I have to multiply by 0.001. (6)
3 (Lessons 7-11)	I can calculate and interpret real world situations using percent increase and decrease. (L7-8) I can use percentages to describe situations that involve error. (L9-11)	 I understand and can solve problems about sales tax and tip. (L7) I can find the percentage increase or decrease when I know the original amount and the new amount. (L8) I understand and can solve problems about commission, interest, markups, and discounts. (L8) I can represent measurement error as a percentage of the correct measurement. I understand that all measurements include some error. I can find a range of possible values for a quantity if I know the maximum percent error and the correct value.

Unit 3-Rational Numbers (ACC 6 Unit 7)

Lesson	Standards
Acc6.7.1	6.NS.C.5, 6.NS.C.6, 7.NS.A.1
Acc6.7.2	6.NS.C.7.a, 6.NS.C.7.b, 6.NS.C.7.d
Acc6.7.3	6.NS.C, 6.NS.C.5, 6.NS.C.6, 6.NS.C.6.a, 6.NS.C.7
Acc6.7.4	6.NS.C.7, 6.NS.C.7.c, 6.NS.C.7.d
Acc6.7.5	6.NS.C.6, 6.NS.C.6.a, 6.NS.C.7, 6.NS.C.7.d
Acc6.7.6	7.NS.A.1, 7.NS.A.1.a, 7.NS.A.1.b
Acc6.7.7	7.NS.A.1.a, 7.NS.A.1.b, 7.NS.A.1.c, 7.NS.A.1.d
Acc6.7.8	7.NS.A.1
Acc6.7.9	7.NS.A.1, 7.NS.A.1.c
Acc6.7.10	7.NS.A.1, 7.NS.A.1.c, 7.NS.A.3
Acc6.7.11	6.NS.C.6, 6.NS.C.6.b, 6.NS.C.6.c, 6.NS.C.8
Acc6.7.12	6.NS.C.6.c, 6.NS.C.7.c, 6.NS.C.8
Acc6.7.13	6.G.A.3, 6.NS.C.6, 6.NS.C.6.b, 6.NS.C.6.c, 6.NS.C.8
Acc6.7.14	7.NS.A.2.a, 7.RP.A
Acc6.7.15	7.EE.B, 7.NS.A.2.c
Acc6.7.16	7.EE.B.4.a, 7.NS.A.2, 7.NS.A.2.b
Acc6.7.17	7.EE.B.3, 7.NS.A.3, 7.RP.A.2
Acc6.7.18	7.NS.A, 7.NS.A.3
Acc6.7.19	7.EE.B, 7.EE.B.4, 7.EE.B.4.a, 7.NS.A.3
Acc6.7.20	7.EE.B.4.a, 7.NS.A.3
Acc6.7.21	6.G.A.3, 6.NS.C.8
Acc6.7.22	7.EE.B.3, 7.NS.A.3

Demonstration of Learning:	Pacing for Unit
CFA 1: Lesson 9 CFA 2: Lesson 16 CFA 3: Lesson 20	

EoU: Version B, remove question 6		
Family Overview (link below)	Integration of Technology:	
Rational Numbers	Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning	
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):	
Absolute value, area, base, (triangle), base (prism), circle, circumference, coefficient, compose, constant of proportionality, coordinate plane, cubed, decompose, dependent variable, deposit, diameter, double number line diagram, equivalent expressions, equivalent ratios, exponent, face, height, independent variable, long division, measurement error, net, opposite vertex, origin, parallelogram, percent, percent error, percentage, percentage decrease, percentage increase, pi, polygon, polyhedron, prism, proportional relationship, pyramid, quadrant, quadrilateral, radius, ratio, rational number, reciprocal, region, repeating decimal, same rate, sign, solution to an equation, squared, surface area, table, tape diagram, term, unit price, unit rate, variable, withdrawal	DESMOS Edulastic	
Connections to Prior Units:	Connections to Future Units:	
ACC 6, Unit 4	ACC 7, Unit 3	
Differentiation through <u>Universal Design for Learning</u>		
UDL Indicator	Teacher Actions:	
Comprehension: Highlight patterns, critical features, big ideas, and relationships	 Highlight or emphasize key elements in text, graphics, diagrams, formulas Use multiple examples and non-examples to emphasize critical features Use cues and prompts to draw attention to critical features Highlight previously learned skills that can be used to solve unfamiliar problems 	
Supporting Multilingual/English Learners		
Related <u>CELP standards</u> :	Learning Targets:	
An ML can construct grade appropriate oral and written claims and support them with reasoning and evidence.	All italicized targets and their related success criteria.	
Lesson Learning Target	Success Criteria/Assessment/Resources	

1 (Lesson 1 ONLY) SKIP Lessons 2-5	I can describe and interpret signed numbers.	 I can explain what 0, positive numbers, and negative numbers mean in the context of temperature and elevation. I can use positive and negative numbers to describe temperature and elevation. I know what positive and negative numbers are.
2 (Lessons 6-10)	I can model and compute addition and subtraction situations that involve signed numbers.	 I can use a number line to add positive and negative numbers. I understand how to add positive and negative numbers in general. I understand what positive and negative numbers mean in a situation involving money. I can explain the relationship between addition and subtraction of rational numbers. I can use a number line to subtract positive and negative numbers. I can find the difference between two rational numbers. I can solve problems that involve adding and subtracting rational numbers. I understand how to subtract positive and negative numbers in general.
*SKIP lessons 11	-13	
3 (Lessons 14-17)	I can model and compute multiplication and division situations that involve signed numbers.	 I can explain what it means when time is represented with a negative number in a situation about speed and direction. I can multiply two negative numbers. I can use rational numbers to represent speed and direction. I can solve problems that involve multiplying rational numbers. I can solve problems that involve multiplying and dividing rational numbers. I can solve problems that involve multiplying and dividing rational numbers. I can solve problems that involve multiplying and dividing rational numbers.

4 (Lessons 18-20)	I can use rational numbers to write and solve equations that describe real world situations.	 I can add, subtract, multiply, and divide rational numbers. I can evaluate expressions that involve rational numbers. I can solve equations that include rational numbers and have rational solutions. I can explain what the solution to an equation means for the situation. I can write and solve equations to represent situations that involve rational numbers.
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Unit 4-Writing and Solving Equations (ACC 7, Unit 3)

Lesson	Standards
Acc7.3.1	7.EE.B, 7.EE.B.4, 7.EE.B.4.a
Acc7.3.2	7.EE.B.3, 7.EE.B.4
Acc7.3.3	7.EE.B.3, 7.EE.B.4
Acc7.3.4	7.EE.B.3, 7.EE.B.4.a
Acc7.3.5	7.EE.B.3, 7.EE.B.4, 7.EE.B.4.a
Acc7.3.6	7.EE.B.3, 7.EE.B.4.a
Acc7.3.7	7.EE.B.4.a
Acc7.3.8	7.EE.B.4.a
Acc7.3.9	7.EE.B.4, 7.EE.B.4.a
Acc7.3.10	7.EE.B.4.a
Acc7.3.11	7.EE.B.3, 7.EE.B.4, 7.EE.B.4.a
Acc7.3.12	7.EE.A.2, 7.EE.B.3, 7.EE.B.4, 7.EE.B.4.a
Acc7.3.13	7.EE.B.4, 7.G.B.5

Demonstration of Learning:	Pacing for Unit
CFA 1: Lesson 6 CFA 2: Lesson 9 CFA 3: Lesson 11 EOU: Assessment A	
Family Overview (link below)	Integration of Technology:
Writing and Solving Equations	Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Alternate interior angles, center of a dilation, clockwise, complementary, congruent, coordinate plane, corresponding, counterclockwise, dilation, equivalent	

expressions, image, reflection, right angle, rigid transformation, rotation, scale, scale drawing, scale factor, scaled copy, sequence of transformations, similar, slope, straight angle, supplementary, tessellation, transformation, translation, transversal, vertex, vertical angles Connections to Prior Units: Acc6.4		Connections to Future Units: Acc7.4
Acc6.7		
	on through <u>Universal Design for Learning</u>	
UDL Indicato		Teacher Actions:
Comprehension: Highlight patterns, critical features, big ideas, and relationships		 Highlight or emphasize key elements in text, graphics, diagrams, formulas Use multiple examples and non-examples to emphasize critical features Use cues and prompts to draw attention to critical features Highlight previously learned skills that can be used to solve unfamiliar problems
Supporting N	Iultilingual/English Learners	
Related CELF	<u>estandards:</u>	Learning Targets:
	construct grade level appropriate oral and and support them with reasoning and	All targets apply and require reasoning with evidence.
Lesson Sequence	Learning Target	Success Criteria
1 (Lessons 1-6)	 I can interpret non-proportional situations with constant rates of change (Lesson 1) I can compare stories with multiple representations (Lessons 2 and 3) I can interpret solutions to equations (Lesson 4 and 5) 	 I can think of ways to solve some more complicated word problems. I can explain how a tape diagram represents parts of a situation and relationships between them. I can use a tape diagram to find an unknown amount in a situation. I can match equations and tape diagrams that represent the same situation. If I have an equation, I can draw a tape diagram that shows the same relationship. I can draw a tape diagram to represent a situation where there is a known amount and

		 several copies of an unknown amount and explain what the parts of the diagram represent. I can find a solution to an equation by reasoning about a tape diagram or about what value would make the equation true. I can draw a tape diagram to represent a situation where there is more than one copy of the same sum and explain what the parts of the diagram represent. I can find a solution to an equation by reasoning about a tape diagram or about what value would make the equation true. I can find a solution to an equation by reasoning about a tape diagram or about what value would make the equation true. I understand the similarities and differences between the two main types of equations we are studying in this unit. When I have a situation or a tape diagram, I can represent it with an equation.
2 (Lessons 7-13)	 I can explain and compare strategies for solving equations with multiple representations (Lessons 8, 9, and 10) I can interpret non-proportional situations with constant rates of change using equations and other representations (Lesson 11 and 12) I can interpret equations involving angle relationships and solve for unknown angle measurements (Lesson 13) 	 I can explain how a balanced hanger and an equation represent the same situation. I can find an unknown weight on a hanger diagram and solve an equation that represents the diagram. I can write an equation that describes the weights on a balanced hanger. I can explain how a balanced hanger and an equation represent the same situation. I can explain why some balanced hangers can be described by two different equations, one with parentheses and one without. I can find an unknown weight on a hanger diagram and solve an equation that represents the diagram. I can write an equation that describes the weights on a balanced hanger. I can find an unknown weight on a hanger diagram. I can write an equation that describes the weights on a balanced hanger. I can write an equation that describes the weights on a balanced hanger. I can use the idea of doing the same to each side to solve equations that have negative numbers or solutions. "For an equation like 3(x+2)=15, I can solve it in two different ways: by first dividing each side by 3, or by first rewriting 3(x+2) using the distributive property.

 For equations with more than one way to solve, I can choose the easier way depending on the numbers in the equation." I can solve story problems by drawing and
 reasoning about a tape diagram or by writing and solving an equation. I can solve story problems about percent increase or decrease by drawing and reasoning about a tape diagram or by writing and solving an equation. I can write an equation to represent a relationship between angle measures and solve
the equation to find unknown angle measures.

Unit 5-Inequalities, Expressions, and Equations (ACC 7 Unit 4)

Standards
6.EE.B.6, 6.EE.B.8, 6.NS.C.7.b
6.EE.B.5, 6.EE.B.8, 6.NS.C.7.a
6.EE.A.2.b, 6.EE.B.5, 6.EE.B.6, 6.EE.B.8
7.EE.B.4.b
7.EE.B.4, 7.EE.B.4.b
7.EE.B.4.b
7.EE.A.1, 7.NS.A.1, 7.NS.A.1.c
7.EE.A.1
7.EE.A.1
7.EE.A.1
7.EE.A.1
8.EE.C, 8.EE.C.7
8.EE.C, 8.EE.C.7
8.EE.C.7, 8.EE.C.7.b
8.EE.C.7.a
8.EE.C.7.a
8.EE.C, 8.EE.C.7, 8.EE.C.8

Demonstration of Learning:	Pacing for Unit
CFA 1: Lesson 4 CFA 2: Lesson 9 CFA 3: Lesson 13 EOU: Assessment B	
Family Overview (link below)	Integration of Technology:
Inequalities, Expressions, and Equations	Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning

Unit-specific	Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):	
coefficient, co coordinate pla dilation, equiv expressions), transformatio factor, scaled similar, slope, supplementar	rior angles, center of a dilation, clockwise, omplementary, congruent, constant term, ane, corresponding, counterclockwise, alent expressions, expand, factor (an image, reflection, right angle, rigid on, rotation, scale, scale drawing, scale copy, sequence of transformations, solution to inequality, straight angle, ry,term, tessellation, transformation, ansversal, vertex, vertical angles	•DESMOS •Edulastic	
Connections	to Prior Units:	Connections to Future Units:	
ACC 7, Unit 3		ACC 7, Unit 5	
Differentiatio	on through <u>Universal Design for Learning</u>		
UDL Indicato	r	Teacher Actions:	
Comprehension: Highlight patterns, critical features, big ideas, and relationships		 Highlight or emphasize key elements in text, graphics, diagrams, formulas Use multiple examples and non-examples to emphasize critical features Use cues and prompts to draw attention to critical features Highlight previously learned skills that can be used to solve unfamiliar problems 	
Supporting N	Supporting Multilingual/English Learners		
Related CELP standards;		Learning Targets:	
An ML can construct grade appropriate oral and written claims and support them with reasoning and evidence.		All targets apply as they require mathematical reasoning with evidence.	
Lesson Sequence	Learning Target	Success Criteria	
1 (Lessons 1-6)	 I can justify reasoning about solutions to inequalities (Lesson 2-5) I can critique the reasoning of others using multiple representations (Lesson 3) I can justify the need for specific information in order to write and solve inequalities (Lesson 6) 	 I can graph inequalities on a number line. I can write an inequality to represent a situation. I can determine if a particular number is a solution to an inequality. I can explain what it means for a number to be a solution to an inequality. I can graph the solutions to an inequality on a number line. 	

		 I can explain what the solution to an inequality means in a situation. I can write inequalities that involves more than one variable. I can describe the solutions to a inequality by solving a related equation and then reasoning about values that make the inequality true. I can write an inequality to represent a situation. I can graph the solutions to an inequality on a number line. I can solve inequalities by solving a related equation and then checking which values are solutions to the original inequality. I can use what I know about inequalities to solve real-world problems.
2 (Lessons 7-11)	 I can justify reasoning about the distributive property (Lesson 7 and 8) I can generalize about when expressions are equivalent (Lesson 9) I can critique reasoning about equivalent expressions (Lesson 10) 	 I can organize my work when I use the distributive property. I can rewrite subtraction as adding the opposite and then rearrange terms in an expression. I can organize my work when I use the distributive property. I can use the distributive property to rewrite expressions with positive and negative numbers. I understand that factoring and expanding are words used to describe using the distributive property to write equivalent expressions are equivalent to each other. When possible, I can write an equivalent expression that has fewer terms. I am aware of some common pitfalls when writing equivalent expressions, and I can avoid them. When possible, I can write an equivalent expression that has fewer terms. Given an expression, I can use various strategies to write an equivalent expression. When I look at an expression, I can notice if some parts have common factors and make the expression shorter by combining those parts.

3 (Lessons 12-17)	 I can critique reasoning about maintaining balance in equations (Lesson 12) I can critique solutions of linear equations (Lesson 13) I can generalize about the structures of equations that have one, infinite, and no solutions (Lessons 14-16) 	 I can add, subtract, multiply, or divide each side of an equation by the same expression to get a new equation with the same solution. I can make sense of multiple ways to solve an equation. I can solve linear equations in one variable. I can determine whether an equation has no solutions, one solution, or infinitely many solutions. I can solve equations with different numbers of solutions. I can use an expression to find when two things, like height, are the same in a real-world situation.
	one, infinite, and no solutions	 solutions, one solution, or infinitely many solutions. I can solve equations with different numbers of solutions. I can use an expression to find when two things, like height, are the same in a real-world

Unit 6-Rigid Transformations and Congruence (ACC 7, Unit 1)

Lesson	Standards
Acc7.1.1	8.G.A.1
Acc7.1.2	8.G.A.1
Acc7.1.3	8.G.A.1
Acc7.1.4	8.G.A.3
Acc7.1.5	8.G.A.1, 8.G.A.3
Acc7.1.6	8.G.A.1.a, 8.G.A.1.b
Acc7.1.7	8.G.A.1.a, 8.G.A.1.b, 8.G.A.1.c
Acc7.1.8	8.G.A.1.a, 8.G.A.1.b, 8.G.A.1.c
Acc7.1.9	8.G.A.1.a, 8.G.A.1.b
Acc7.1.10	8.G.A.1, 8.G.A.2
Acc7.1.11	8.G.A.1.a, 8.G.A.2
Acc7.1.12	7.G.B.5, 8.G.A.1, 8.G.A.5
Acc7.1.13	8.G.A.2, 8.G.A.5
Acc7.1.14	8.G.A.5, 8.G.B.6
Acc7.1.18	8.G.A

Demonstration of Learning:	Pacing for Unit
CFA 1: Lesson 3 CFA2: Lesson 6 MoU: Assessment (B) CFA 3: Lesson 12 EoU: Assessment (A) - eliminate Q 3 & Q 7	
Family Overview (link below)	Integration of Technology:
Rigid Transformations and Congruence	Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology

		(beyond core resources):
Alternate interior angles, clockwise, complementary, congruent, coordinate plane, corresponding, counterclockwise, image, reflection, right angle, rigid transformation, rotation, sequence of transformations, straight angle, supplementary, tessellation, transformations, translation, transversal, vertex, vertical angles		•DESMOS •Edulastic
Connections	to Prior Units:	Connections to Future Units:
None		Acc7.2
Differentiatio	n through Universal Design for Learning	
UDL Indicato	r	Teacher Actions:
Comprehensi visualization	on: Guide information processing and	 Give explicit prompts for each step in a sequential process Provide options for organizational methods and approaches (tables and algorithms for processing mathematical operations) Provide interactive models that guide exploration and new understandings Introduce graduated scaffolds that support information processing strategies Progressively release information (e.g., sequential highlighting) Remove unnecessary distractions unless they are essential to the instructional goal
Supporting N	Iultilingual/English Learners	
Related CELF	standards:	Learning Targets:
An EL can det in information	ermine the meaning of words and phrases al text.	Applies to ALL learning targets in this unit.
Lesson Sequence	Learning Target	Success Criteria
1 (Lessons 1-5)	 I can identify and describe the movements of figures. (Lessons 1-3) I can apply transformations to points on a grid if I know their coordinates. (Lesson 4) 	 Lesson 1 I can describe how a figure moves and turns to get from one position to another. Lesson 2 I can identify corresponding points before and after a transformation. I know the difference between translations, rotations, and reflections. Lesson 3 I can use grids to carry out transformations of figures.

		 I can use the terms translation, rotation, and reflection to precisely describe transformations. Lesson 4 I can apply transformations to points on a grid if I know their coordinates. Lesson 5 I can apply transformations to a polygon on a grid if I know the coordinates of its vertices.
2 (Lessons 6-9)	 I can justify whether or not rigid transformations could produce an image. (Lessons 6) I can generalize about rotating line segments 180 degrees. (Lesson 7) I can generalize about the relationship between vertical angles. (Lesson 8) I can describe transformations using corresponding points, line segments and angles. (Lesson 9) 	 Lesson 6 I can describe the effects of a rigid transformation on the lengths and angles in a polygon. Lesson 7 I can describe how to move one part of a figure to another using a rigid transformation. Lesson 8 I can describe the effects of a rigid transformation on a pair of parallel lines. If I have a pair of vertical angles and know the angle measure of one of them, I can find the angle measure of the other. Lesson 9 I can find missing side lengths and angle measures using properties of rigid transformations.
3 (Lessons 10-11)	 I can justify whether or not shapes are congruent. (10) I can determine if a polygon is congruent and justify it with reasoning. (11) 	 Lesson 10 I can decide visually whether or not two figures are congruent. Lesson 11 I can decide using rigid transformations whether or not two figures are congruent. I can use distances between points to decide if two figures are congruent.
4 (Lessons 12-14)	•I can generalize the triangle sum theorem using rigid transformations or the congruence or alternate interior angles of parallel lines cut by a transversal. (14)	 Lesson 12 I can find unknown angle measures by reasoning about complementary or supplementary angles. If I have two parallel lines cut by a transversal, I can identify alternate interior angles and use that to find missing angle measurements. Lesson 13

triangle, I can find the third angle measure. Lesson 14 I can explain using pictures why the sum of the angles in any triangle is 180 degrees.

Unit 7-Scale Drawings, Similarity, and Slope (ACC 7, Unit 2)

Lesson	Standards
Acc7.2.1	7.G.A.1
Acc7.2.2	7.G.A.1, 7.RP.A.2
Acc7.2.3	7.G.A.1, 7.RP.A.2
Acc7.2.4	7.G.A.1
Acc7.2.5	7.G.A.1
Acc7.2.6	7.G.A.1, 7.G.B.6, 7.RP.A, 7.RP.A.3
Acc7.2.7	7.G.A.1
Acc7.2.8	8.G.A
Acc7.2.9	8.G.A
Acc7.2.10	8.G.A, 8.G.A.3
Acc7.2.11	8.G.A.2, 8.G.A.4
Acc7.2.12	8.G.A.2, 8.G.A.4
Acc7.2.13	8.G.A, 8.G.A.5
Acc7.2.14	8.G.A, 8.G.A.4
Acc7.2.15	8.EE.B.6
Acc7.2.16	8.EE.B.6, 8.G.A
Acc7.2.17	8.EE.B.6, 8.G.A, 8.G.A.3
Acc7.2.18	7.G.A.1
Acc7.2.19	8.G.A.4, 8.G.A.5

Demonstration of Learning:	Pacing for Unit
CFA 1: Lesson 5 MoU: Assessment (A) CFA 2: Lesson 13 CFA 3: Lesson 15 EoU: Assessment (A)	

Family Overview (link below)		Integration of Technology:	
		Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning	
Unit-specific Vocabulary:		Aligned Unit Materials, Resources, and Technology (beyond core resources):	
Alternate interior angles, center of a dilation, clockwise, complementary, congruent, coordinate plane, corresponding, counterclockwise, dilation, image, reflection,right angle, rigid transformation, rotation, scale, scale drawing, scale factor, scaled copy, sequence of transformations, similar, slope, straight angle, supplementary, tessellation, transformation, transversal,		DESMOS Edulastic	
Connections to Prior Units:		Connections to Future Units:	
ACC 6, Unit 2; A	ICC 7, Unit 1	ACC7, Unit 4	
Differentiation through Universal Design for Learning			
UDL Indicator		Teacher Actions:	
Comprehension: Activate or Supply Background Knowledge		 Anchor instruction by linking to and activating relevant prior knowledge (e.g., using visual imagery, concept anchoring, or concept mastery routines) Use advanced organizers (e.g., KWL methods, concept maps) Pre-teach critical prerequisite concepts through demonstration or models Make explicit cross-curricular connections (e.g., teaching literacy strategies in the social studies classroom) 	
	Itilingual/English Learners		
Related <u>CELP standards</u> ;		Learning Targets:	
An EL can evalu questions or so	ate and communicate findings to answer lve problems.	See Italicized Learning Target	
Lesson Sequence	Learning Target	Success Criteria	
1 (Lesson 1-3)	 I can describe the features of scaled copies. (Lesson 1) I can create a scale copy given the scale factor (Lesson 2) 	Lesson 1 •I can describe some characteristics of a scaled copy.	

	 I can describe the relationship between a scale factor and a scale copy of its original figure (Lesson 3) 	 I can tell whether or not a figure is a scaled copy of another figure. Lesson 2: I can describe what the scale factor has to do with a figure and its scaled copy. I can draw a scaled copy of a figure using a given scale factor. I know what operation to use on the side lengths of a figure to produce a scaled copy. Lesson 3 I can describe the effect on a scaled copy when I use a scale factor that is greater than 1, less than 1, or equal to 1. I can explain how the scale factor that takes Figure A to its copy Figure B is related to the scale factor that takes Figure A.
2 (Lessons 4-6) Skip Lesson 7	•I can explain how to use scale drawings to find actual distances and areas (Lessons 4-6)	 Lesson 4 I can explain what a scale drawing is, and I can explain what its scale means. I can use actual distances and a scale to find scaled distances. I can use a scale drawing and its scale to find actual distances. Lesson 5 I can determine the scale of a scale drawing when I know lengths on the drawing and corresponding actual lengths. I know how different scales affect the lengths in the scale drawing. When I know the actual measurements, I can create a scale drawing at a given scale. Lesson 6 Given a scale drawing, I can create another scale drawing that shows the same thing at a different scale. I can use a scale drawing to find actual areas.
3 (Lessons 8-10)	 I can describe the effects of a dilation on a figure (Lesson 8-9) I can explain how to apply dilations to images on a coordinate plane. (Lesson 10) 	 Lesson 8 I can decide if one rectangle is a dilation of another rectangle. I know how to use a center and a scale factor to describe a dilation.

		 Lesson 9 I can apply a dilation to a polygon using a ruler. I can apply dilations to figures on a circular grid when the center of dilation is the center of the grid. Lesson 10 I can apply dilations to figures on a square grid. I can apply dilations to polygons on a rectangular grid if I know the coordinates of the vertices and of the center of dilation. If I know the angle measures and side lengths of a polygon, I know the angles measures and side lengths of the polygon if I apply a dilation with a certain scale factor.
4 (Lessons 11-14)	 I can describe sequences of transformations to justify if two polygons are similar (Lessons 11-12) I can explain how to determine whether triangles are congruent, similar, or neither. (Lesson 13) I can use properties of similar figures to find missing side lengths. (Lesson 14) 	 Lesson 11 I can apply a sequence of transformations to one figure to get a similar figure. I can use a sequence of transformations to explain why two figures are similar. Lesson 12 I can use angle measures and side lengths to conclude that two polygons are not similar. I know the relationship between angle measures and side lengths in similar polygons. Lesson 13 I know how to decide if two triangles are similar just by looking at their angle measures. Lesson 14 I can decide if two triangles are similar by looking at quotients of lengths in a pair of similar triangles using quotients of side lengths.
5 (Lessons 15-17)	 I can justify that slope triangles are similar. (15) I can determine if a point is on a line. (Lesson 16 & 17) 	 Lesson 15 I can draw a line on a grid with a given slope. I can find the slope of a line on a grid. Lesson 16 I can decide whether a point is on a line by finding quotients of horizontal and vertical distances. Lesson 17

	•I can find an equation for a line and use that to decide which points are on that line.
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Unit 8-Linear Relationships (ACC 7, Unit 5)

Lesson	Standards
Acc7.5.1	8.EE.B, 8.EE.B.5
Acc7.5.2	8.EE.B, 8.EE.B.5
Acc7.5.3	8.EE.B, 8.EE.B.5
Acc7.5.4	8.EE.B
Acc7.5.5	8.EE.B, 8.EE.B.5
Acc7.5.6	8.EE.B, 8.EE.B.6
Acc7.5.7	8.EE.B, 8.G.A.1
Acc7.5.8	8.EE.B
Acc7.5.9	8.EE.B, 8.EE.B.6
Acc7.5.10	8.EE.B, 8.EE.C
Acc7.5.11	8.EE.C, 8.EE.C.8, 8.EE.C.8.a
Acc7.5.12	8.EE.C.8
Acc7.5.13	8.EE.C.8, 8.EE.C.8.a, 8.EE.C.8.b
Acc7.5.14	8.EE.C.8, 8.EE.C.8.a
Acc7.5.15	8.EE.C.8
Acc7.5.16	8.EE.C.8, 8.EE.C.8.b, 8.EE.C.8.c
Acc7.5.17	8.SP.A, 8.SP.A.1
Acc7.5.18	8.SP.A.1, 8.SP.A.3
Acc7.5.19	8.SP.A.1, 8.SP.A.2
Acc7.5.20	8.SP.A.1, 8.SP.A.2
Acc7.5.21	8.SP.A.1, 8.SP.A.2, 8.SP.A.3
Acc7.5.22	8.SP.A.1, 8.SP.A.2, 8.SP.A.3
Acc7.5.23	8.SP.A.4
Acc7.5.24	8.SP.A.4

Acc7.5.25	8.EE.B.6, 8.EE.C.8.a
Acc7.5.26	8.EE.C.8.c
Acc7.5.27	8.SP.A

Demonstration of Learning:	Pacing for Unit	
CFA 1: Lesson 5 CFA 2: Lesson 10 MoU: Assessment (A) CFA 3: Lesson 15 EoU: Assessment (B) - add questions 1 & 3 from (A)		
Family Overview (link below)	Integration of Technology:	
Linear Relationships	Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning	
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):	
Alternate interior angles, center of a dilation, clockwise, coefficient, complementary, congruent, constant of proportionality, constant term, coordinate plane, corresponding, counterclockwise, dilation, equivalent expressions, expand, factor, image, linear relationship, negative association, outlier, positive association, rate of change, reflection, relative frequency, right angle, rotation, scale, scale drawing, scale factor, scaled copy, scatter plot, segmented bar graph, sequence of transformations, similar, slope, solution to an equation with two variables, solution to an inequality, straight angle, supplementary, system of equations, term, tessellation, transformation, translation, transversal, two-way table, vertex, vertical angles, vertical intercept	DESMOS Edulastic	
Connections to Prior Units:	Connections to Future Units:	
Acc6.8	Acc7.6	
Differentiation through Universal Design for Learning		
UDL Indicator	Teacher Actions:	
Expression & Communication: Use multiple media for communication	 Compose in multiple media such as text, speech, drawing, illustration, comics, storyboards, design, film, music, dance/movement, visual art, sculpture, or video Use physical manipulatives (e.g., blocks, 3D models, base-ten blocks) Use social media and interactive web tools (e.g., discussion forums, chats, web design, 	

annotation tools, storyboards, comic strips, animation presentations)

• Solve problems using a variety of strategies

Supporting Multilingual/English Learners		
Related <u>CELP standards</u> :		Learning Targets:
An ML can construct appropriate oral and written claims and support them with reasoning and evidence.		Applies to ALL learning targets in this unit.
Lesson Sequence	Learning Target	Success Criteria
1 Lessons 1-3	 I can represent situations involving proportional relationships. (1) I can interpret situations involving proportional relationships. (1) I can represent constants of proportionality in different ways (2). I can interpret graphs sing different scales (2) 	 Lesson 1 I can graph a proportional relationship from a story. I can use the constant of proportionality to compare the pace of different animals. Lesson 2 I can graph a proportional relationship from an equation. I can scale and label coordinate axes in order to graph a proportional relationship. I can tell when two graphs are of the same proportional relationship even if the scales are different. Lesson 3 I can compare proportional relationships represented in different ways.
2 Lessons 4-7	 I can explain how to use a graph to determine information about a linear situation (4). I can interpret slopes and intercepts of linear graphs (5). I can explain how to determine slope from a graph (5). I can represent slope using expressions (6). 	 Lesson 4 I can find the rate of change of a linear relationship by figuring out the slope of the line representing the relationship. Lesson 5 I can interpret the vertical intercept of a graph of a real-world situation. I can match graphs to the real-world situations they represent by identifying the slope and the vertical intercept. Lesson 6 I can use patterns to write a linear equation to represent a situation. I can write an equation for the relationship between the total volume in a graduated

		 cylinder and the number of objects added to the graduated cylinder. Lesson 7 I can explain where to find the slope and vertical intercept in both an equation and its graph. I can write equations of lines using y=mx+b.
3 Lessons 8-11	 I can represent situations using negative slopes and slopes of zero. (8) I can interpret situations using negative slopes and slopes of zero (8). I can represent situations by graphing lines and writing equations (10). I can explain how slope relates to changes in a situation (10). 	 Lesson 8 I can give an example of a situation that would have a negative slope when graphed. I can look at a graph and tell if the slope is positive or negative and explain how I know. Lesson 9 I can calculate positive and negative slopes given two points on the line. I can write equations of vertical and horizontal lines. Lesson 10 I know that the graph of an equation is a visual representation of all the solutions to the equation. I understand what the solution to an equation in two variables is. Lesson 11 I can find solutions (x,y) to linear equations given either the x- or the y-value to start from.
4 Lessons 12-16 Skip lessons 17-24	 I can represent situations involving systems of linear equations (12,13, 16) I can interpret situations involving systems of linear equations (13). 	 Lesson 12 I can use graphs to find an ordered pair that two real-world situations have in common. Lesson 13 I can explain the solution to a system of equations in a real-world context. I can explain what a system of equations is. I can make graphs to find an ordered pair that two real-world situations have in common. Lesson 14 I can graph a system of equations. I can use the structure of equations to help me figure out how many solutions a system of equations has.

		•I can write a system of equations from a real-world situation.
5 Optional Lessons 25-26	 I can represent situations involving linear relationships. (25) I can interpret situations involving linear relationships (25). I can explain how to answer questions about systems of equations (26). 	 Lesson 25 I can write linear equations to reason about real-world situations. Lesson 26 I can use a system of equations to represent a real-world situation and answer questions about the situation.

Unit 9-Functions and Volume (ACC 7, Unit 6)

Lesson	Standards
Acc7.6.1	8.F.A.1
Acc7.6.2	8.F.A.1
Acc7.6.3	8.F.A, 8.F.A.1, 8.F.B.4
Acc7.6.4	8.F.A.1, 8.F.A.3
Acc7.6.5	8.F.A.1, 8.F.B, 8.F.B.5
Acc7.6.6	8.F.B.5
Acc7.6.7	8.F.A.2, 8.F.A.3
Acc7.6.8	8.F.A.2, 8.F.A.3, 8.F.B.4
Acc7.6.9	8.F.B.4
Acc7.6.10	8.F.B, 8.F.B.4, 8.F.B.5
Acc7.6.11	7.G.A.3, 7.G.B.6
Acc7.6.12	8.F.B, 8.F.B.4, 8.G.C
Acc7.6.13	8.G.C
Acc7.6.14	7.G.B.6
Acc7.6.15	7.G.A.3, 7.G.B.6
Acc7.6.16	7.G.B.6
Acc7.6.17	7.G.B, 7.G.B.6, 7.RP.A
Acc7.6.18	8.G.C.9
Acc7.6.19	8.G.C.9
Acc7.6.20	8.G.C.9
Acc7.6.21	8.F.A.1, 8.F.B, 8.G.C, 8.G.C.9
Acc7.6.22	8.F.A.3, 8.F.B, 8.G.C.9
Acc7.6.23	8.G.C, 8.G.C.9
Acc7.6.24	8.G.C, 8.G.C.9
Acc7.6.25	8.G.C.9
Acc7.6.26	7.G.A.2, 7.G.B.6

Acc7.6.27	8.F.A, 8.G.C.9

Demonstration of Learning:	Pacing for Unit	
CFA 1 Lesson 5 MoU Assessment (B) CFA 2 Lesson 20 CFA 3 Lesson 24 EoU Assessment (A)		
Family Overview (link below)	Integration of Technology:	
Functions and Volume	Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning	
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):	
Alternate interior angles, base, center of a dilation, clockwise, coefficient, complementary, cone, congruent, constant of proportionality, constant term, coordinate plane, corresponding, counterclockwise, cross section, cylinder, dependent variable, dilation, equivalent expressions, expand, factor, function, image, independent variable, linear relationship, negative association, outlier, positive association, prism, pyramid, radius, rate of change, reflection, relative frequency, right angle, rigid transformation, rotation, scale, scale drawing, scale factor, scaled copy, segmented bar graph, sequence of transformations, similar, slope, solution to an equation, solution to an inequality, sphere, straight angle, supplementary, surface area, system of equations, term, tessellation, transformation, translation, transversal, two-way table, vertex, vertical angles, vertical intercept, volume	DESMOS Edulastic	
Connections to Prior Units:	Connections to Future Units:	
ACC 6, Unit 1	None	
Differentiation through Universal Design for Learning		
UDL Indicator	Teacher Actions:	
Comprehension: Highlight patterns, critical features, big ideas, and relationships	 Highlight or emphasize key elements in text, graphics, diagrams, formulas Use multiple examples and non-examples to emphasize critical features Use cues and prompts to draw attention to critical features 	

٠	Highlight previously learned skills that
	can be used to solve unfamiliar
	problems

Supporting Multilingual/English Learners				
Related CELI	<u> Standards:</u>	Learning Targets:		
An ML student can adapt language choices to purpose, task, and audience when speaking and writing.		See Italicized Learning Targets		
Lesson Sequence	Learning Target	Success Criteria		
1 (Lessons 1-2)	 I can describe and identify how input-output diagrams represent rules. (Lesson 1) I can describe and identify different situations in context, using function rules (Lesson 2) 	 Lesson 1 I can write rules when I know input-output pairs. I know how an input-output diagram represents a rule. Lesson 2 I know that a function is a rule with exactly one output for each allowable input. I know that if a rule has exactly one output for each allowable input, then the output depends on the input. 		
2 (Lessons 3-7)	 I can interpret different representations of functions, to identify independent and dependent variables, to write equations. (Lesson 3 & 4) I can interpret multiple representations of functions, including graph, tables & equations, and explain how to find information in each type of representation (Lessons 5-7) 	 Lesson 3 I can find the output of a function when I know the input. I can name the independent and dependent variables for a given function and represent the function with an equation. Lesson 4 I can identify graphs that do, and do not, represent functions. I can use a graph of a function to find the output for a given input and to find the input(s) for a given output. Lesson 5 I can explain the story told by the graph of a function. Lesson 6 I can draw the graph of a function that represents a real-world situation. Lesson 7 I can compare inputs and outputs of functions that are represented in different ways. 		

3 (Lessons 8-10)	 I can analyze situations to create a model of a non linear data, to answer questions as it relates to rate of change and initial value (Lessons 8-10) 	 Lesson 8 I can determine whether a function is increasing or decreasing based on whether its rate of change is positive or negative. I can explain in my own words how the graph of a linear function relates to its rate of change and initial value. Lesson 9 I can decide when a linear function is a good model for data and when it is not. I can use data points to model a linear function. Lesson 10 I can create graphs of nonlinear functions with pieces of linear functions.
4 (Lessons 11-20) Skip Lessons 14-17	 I can describe, compare and contrast different cross sections that could result from slicing a pyramid or prism (Lesson 11) I can interpret (orally and in writing) a graph of heights of certain cylinders as a function of volume, and compare the rates of change of the functions (lesson 12) I can estimate the volumes of various containers using different units of measure, and explain (orally) the reasoning. (Lesson 13) I can use the volume formula for cones and cylinders to solve real world situations (Lessons 18-20) 	 Lesson 11 I can explain that when a three dimensional figure is sliced it creates a face that is two dimensional. I can picture different cross sections of prisms and pyramids. Lesson 12 I can collect data about a function and represent it as a graph. I can describe the graph of a function in words. Lesson 13 I know that volume is the amount of space contained inside a three-dimensional figure. I recognize the 3D shapes cylinder, cone, rectangular prism, and sphere. Skip Lessons 14-17 Lesson 18 I can find missing information about a cylinder if I know the formula for the volume of a cylinder. Lesson 19 I can find the volume of a cone in mathematical and real-world situations. I know the formula for the volume of a cone.
5 (Lessons	• I can determine what information is needed to	Lesson 21

21-25)	solve a problem involving volumes of cones, cylinders, and spheres. (Lesson 23-25) • I can explain and model relationships between scale factor and volume of cylinders and cones. (Lessons 21-22)	 I can create a graph the relationship between volume and height for all cylinders (or cones) with a fixed radius. I can explain in my own words why changing the height by a scale factor changes the volume by the same scale factor. Lesson 22 I can create a graph representing the relationship between volume and radius for all cylinders (or cones) with a fixed height. I can explain in my own words why changing the radius by a scale factor changes the volume by the scale factor squared. Lesson 23 I can estimate the volume of a hemisphere by calculating the volume of shape I know is larger and the volume of a shape I know is smaller. Lesson 24 I can find the radius of a sphere if I know its volume. I can solve mathematical and real-world problems about the volume of cylinders, cones, and spheres.
6 (Lessons 27) Skip Lesson 26	 Interpret (orally and in writing) functions that represent the volume of a sphere, cone, and cylinder, using different representations. (Lesson 27) 	 Lesson 27 I can compare functions about volume represented in different ways.

Unit 10-Pythagorean Theorem and Irrational Numbers (ACC 7, Unit 8)

Lesson	Standards	
Acc7.8.1	8.EE.A.2, 8.G.B, 8.G.B.6, 8.NS.A.2	
Acc7.8.2	8.EE.A.2, 8.F.B, 8.NS.A	
Acc7.8.3	8.EE.A.2, 8.NS.A, 8.NS.A.2	
Acc7.8.4	8.EE.A.2, 8.NS.A.2	
Acc7.8.5	8.G.B, 8.G.B.6, 8.G.B.7	
Acc7.8.6	8.G.B.6, 8.G.B.7	
Acc7.8.7	8.G.B, 8.G.B.6	
Acc7.8.8	8.EE.A.2, 8.G.B.7, 8.NS.A	
Acc7.8.9	8.G.B.8	
Acc7.8.10	8.EE.A.2, 8.NS.A.2	
Acc7.8.11	8.EE.A, 8.NS.A, 8.NS.A.1	
Acc7.8.12	8.NS.A.1	
Acc7.8.13	8.G.B.7	

Demonstration of Learning:	Pacing for Unit
CFA 1 (Lesson 3) CFA 2 (Lesson 7) CFA 3 (Lesson 10) EoU Assessment (A)	
Family Overview (link below)	Integration of Technology:
Pythagorean Theorem and Irrational Numbers	Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Alternate interior angles, base (of prism), base (of an exponent), center of a dilation, clockwise, coefficient, complementary, cone, congruent, constant of proportionality, constant term, coordinate plane,	DESMOS Edulastic

Lesson Learning Target Sequence	Success Criteria
An EL can evaluate and communicate findings to answer questions or solve problems.	Applies to all Learning Targets.
Related <u>CELP standards</u> :	Learning Targets:
Supporting Multilingual/English Learners	
Representation: Clarifying vocabulary and symbols	 Pre-teach vocabulary and symbols, especially in ways that promote connection to the learners' experience and prior knowledge Provide graphic symbols with alternative text descriptions Highlight how complex terms, expressions, or equations are composed of simpler words or symbols Embed support for vocabulary and symbols within the text (e.g., hyperlinks or footnotes to definitions, explanations, illustrations, previous coverage, translations)
UDL Indicator	Teacher Actions:
Differentiation through Universal Design for Learning	
ACC 6, Unit 1	None
Connections to Prior Units:	Connections to Future Units:
corresponding, counterclockwise, cross section, cube root, cylinder, dependent variable, dilation, equivalent expressions, expand, exponent, factor, function, hypotenuse, image, independent variable, irrational number, legs, linear relationship, negative association, outlier, positive association, prism, pyramid, pythagorean theorem, radius, rate of change, rational number, reciprocal, reflection, relative frequency, repeating decimal, right angle, rigid transformation, rotation, scale, scale drawing, scale factor, scaled copy, scatter plot, scientific notation, segmented bar graph, sequence of transformations, similar, slope, solution to an equation, solution to an inequality, sphere, square root, straight angle, supplementary, surface area, system of equations, term, tessellation, transformation, translation, transversal, two-way table, vertex, vertical angles, vertical intercept, volume	

1 (Lessons 1-4)	 I can explain and model square roots using math notation (Lessons 1-2) I can explain the relationship between square roots and rational/irrational numbers using a number line (Lesson 3-4) 	 Lesson 1 I can find the area of a tilted square on a grid by using methods like "decompose and rearrange" and "surround and subtract." I can find the area of a triangle. Lesson 2 I can explain what a square root is. If I know the area of a square, I can express its side length using square root notation. I understand the meaning of expressions like "SQUARE ROOT 25" and "SQUARE ROOT 3". Lesson 3 I know what an irrational number is and can give an example I know what a rational number is and can give an example. Lesson 4 I can find a decimal approximation for square roots. I can plot square roots on the number line. When I have a square root, I can reason about which two whole numbers it is between.
2 (Lessons 5-9)	 I can use the Pythagorean Theorem to justify if a triangle is a right triangle (Lessons 5-7) I can use the Pythagorean Theorem to solve problems (Lessons 8, 9 & 13) 	 Lesson 5 I can explain what the Pythagorean Theorem says. Lesson 6 I can explain why the Pythagorean Theorem is true. If I know the lengths of two sides, I can find the length of the third side in a right triangle. When I have a right triangle, I can identify which side is the hypotenuse and which sides are the legs. Lesson 7 I can explain why it is true that if the side lengths of a triangle satisfy the equation a² + b² = c² then it must be a right triangle. If I know the side lengths of a triangle, I can determine if it is a right triangle or not. Lesson 8 I can use the Pythagorean Theorem to solve problems.

		 I can find the distance between two points in the coordinate plane. I can find the length of a diagonal line segment in the coordinate plane.
3 (Lessons 10-11) Skip Lesson 12	 I can explain and model cube roots using math notation (Lesson 10) I can represent rational numbers as equivalent decimals and explain the solution method (Lesson 11) 	 Lesson 10 I can approximate cube roots. I know what a cube root is. I understand the meaning of expressions like "cubed root 5". Lesson 11 I can write a fraction as a repeating decimal. I understand that every number has a decimal expansion.
4 (Lesson 13)	 I can use the Pythagorean Theorem to solve problems (Lessons 8, 9 & 13) 	 Lesson 13 I can apply what I have learned about the Pythagorean Theorem to solve a more complicated problem. I can decide what information I need to know to be able to solve a real-world problem using the Pythagorean Theorem.

Course Assessment Map

Edulastic Links to be Added at a later time

Unit	Assessment 1	Assessment 2	Assessment 3	Assessment 4	Assessment 5
Unit 1-Proportional Relationships	CFA 1 (L3)	CFA 2 (L7)	CFA 3 (L16)	EOU (B)	
Unit 2-Percentage Increase and Decrease	CFA 1 (L4)	CFA 2 (L8)	CFA 3 (L10)	EOU (A)	
Unit 3-Rational Numbers	CFA 1 (L9)	CFA 2 (L16)	CFA 3 (L20)	EOU (B)*	
Unit 4-Writing and Solving Equations	CFA 1 (L6)	CFA 2 (L9)	CFA 3 (L11)	EOU (A)	
Unit 5-Inequalities, Expressions, and Equations	CFA 1 (L4)	CFA 2 (L9)	CFA 3 (L13)	EOU (B)	
Unit 6-Rigid Transformations and Congruence	CFA 1 (L3)	CFA 2 (L6)	MOU (B)	CFA 3 (L12)	EOU (A)*
Unit 7-Scale Drawings, Similarity and Slope	CFA 1 (L5)	MOU (A)	CFA 2 (L13)	CFA 3 (L15)	EOU (A)
Unit 8-Linear relationships	CFA 1 (L5)	CFA 2 (L10)	MOU (A)	CFA 3 (L15)	EOU (B)*
Unit 9-Functions and Volume	CFA 1 (L5)	MOU (B)	CFA 2 (L120)	CFA (L24)	EOU (A)
Unit 10-Pythagorean Theorem and Irrational Numbers	CFA 1 (L 3)	CFA 2 (L7)	CFA 3 (L10)	EOU (A)	