Pre-Algebra Pacing Guide 2020-2021

4.0 Target	3.0 Target	2.0 Target	Pacing & Unit Dates
Unit # 1: Ratios and Proportions			
Priority Targets			**25 days** **Unit Dates:** **August 15 - September 28** **Benchmark Dates:** **September 21 - September 28** **Trimester #1**
Use ratio relationships to solve more complex problems.	**7.RP.2 - Use a ratio table or graph in a real-world context to write the equation that describes the line.**	Interpret the relationship shown by a given point on a graph.	
Use proportional reasoning to evaluate more complex problems.	**7.RP.3 - Use real-world proportional relationships to solve problems with rational numbers, including those with unit rates.**	Use real-world proportional relationships to solve problems.	
Apply percents to complex problems.	**6.RP.3c - Solve an applied percent problem.**	Apply ratios and unit rate reasoning to solve real-world problems with percents.	
Non-Priority Targets			
	6.RP.1 - Use ratios, including those with rational numbers, to solve real-world problems.		
Unit # 2: Introduction to Rational Numbers			
Priority Targets:			35 days Unit Dates: September 25- November 20 Benchmark Dates: November 14 - November 20 Trimester #2
Solve for missing values in a problem involving addition and subtraction of rational numbers.	**7.NS.1 - Add and subtract rational numbers.**	Add and subtract positive and negative integers.	
Solve for missing values in a problem involving multiplication and division of rational numbers.	**7.NS.2 - Multiply and divide rational numbers.**	Multiply and divide positive and negative integers.	
Explain how changing the base or exponent changes the outcome. (Quiz 1: 2^5 vs 5^2; Quiz 2: (1/2)^17 vs (1/2)^18; Quiz 3: (0.432)^20 vs (0.432)^21)	**6.EE.1 - Evaluate numerical expressions using order of operations, including exponents and rational numbers.**	Evaluate whole number expressions using order of operations, including whole number exponents.	
N/A	**6.LT.0 - Demonstrate the ability to retain content knowledge when solving problems with ratios.**	Demonstrate ability to partially retain content knowledge over time.	
Non-Priority Targets:			
Order a list of absolute values requiring computations of rational numbers.	**6.NS.7 - Order a list of absolute values of rational numbers.**	Define absolute value and interpret the absolute value of rational numbers in real-world situations.	
Find the distance between points from a reflected shape.	**6.NS.8 - Determine distances on the coordinate plane.**	Graph an ordered pair on the coordinate plane.	
Unit # 3: Expressions			
Solve for missing values in a problem involving two equivalent expressions.	**7.EE.1 - Apply properties of operations to generate equivalent expressions, including those with rational numbers.**	Apply properties of operations to generate equivalent expressions with integers.	**14 days** **Unit Dates:** **November 21 - December 20** **Benchmark Dates:** **December 16 - December 20** **Trimester #2**
Solve for a missing value in an expression in which letters stand for numbers.	**6.EE.2 - Write expressions in which letters stand for numbers in a real-world context.**	Write simple expressions in which letters stand for numbers.	
N/A	**6.LT.0 - Demonstrate the ability to retain content knowledge when solving problems with rational numbers.**	Demonstrate ability to partially retain content knowledge over time.	
Unit # 4: Equations			
Priority Targets:			25 days Unit Dates: January 6 - February 14 Benchmark Dates: February 10 - February 14 Trimester #2
Graph an absolute value equation with two variables.	**6.EE.9 - Write and use the equation of a line.**	Describe the relationship between dependent and independent variables as displayed in graphs or tables.	
Solve an equation where the variable is in the denominator of a fraction.	**7.EE.4.a - Solve a real life problem which first requires writing a multi-step equation, with variables on both sides of the equal sign.**	Solve multi-step equations with variables on both sides of the equal sign.	
Solve a compound inequality.	**7.EE.4.b - Solve a two-step inequality, including those in a real-world context.**	Write an inequality of the form x>c or x<c to represent a constraint in real-world context using <, >, ≤, ≥.	
N/A	**6.LT.0 - Demonstrate the ability to retain content knowledge when solving problems with expressions.**	Demonstrate ability to partially retain content knowledge over time.	

Non-Priority Targets:			Trimester #2
	6.EE.6/7 - Write and solve one-step equations in a real-world context with rational numbers. (LESS)		
	6.EE.8 - Write an inequality of the form x>c or x<c to represent a constraint in real-world context using <, >, ≤, ≥.		
Unit # 5: Geometry			
Part A: Priority Targets			
Solve complex surface area problems (missing measurements, combined shapes)	**7.G.4 - Find the surface area of three-dimensional shapes in real-world contexts, including those with fractional sides.**	Calculate the area given the circumference of a circle and vice versa.	**Part A** **15 days** **Unit Dates:** **February 15 - March 10** **Benchmark Dates:** **March 4 - March 10** **Trimester #3**
Solve complex problems involving the volume of three-dimensional shapes. (Including compound shapes and unit conversions. Ex. sandbox filled with an unknown number of bags of sand)	**7.G.6 - Given the volume, find the length of a missing measurement or find the volume of a combined shape.**	Calculate the volume of three-dimensional shapes in a real-world context, including those with fractional sides.	
N/A	**6.LT.0 - Demonstrate the ability to retain content knowledge when solving problems with equations.**	Demonstrate ability to partially retain content knowledge over time.	
Part B: Priority Targets			
Solve a complex problem requiring multi-step algebraic equations.	**7.G.5 - Solve multi-step mathematical problems involving angle measures requiring multi-step algebraic equations and rational numbers.**	Use angle relationships (ie. supplementary, complementary, adjacent, and vertical angles, and angle sum and exterior angle of triangles) to solve for missing values.	**Part B** **15 days** **Unit Dates:** **March 11 - April 9** **Benchmark Dates:** **April 2 - April 9** **Trimester #3**
Solve a complex problem using Pythagorean Theorem.	**8.G.7 - Apply the Pythagorean Theorem to solve problems, including distance problems.**	Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-life problems in 2 dimensions, including sides that have lengths that are rational numbers.	
N/A	**6.LT.0 - Demonstrate the ability to retain content knowledge over time.** **Demonstrate the ability to retain content knowledge when solving problems with expressions.**	Demonstrate ability to partially retain content knowledge over time.	
Part C: Priority Targets			
Perform complex transformations. (Ex. rotate 45º or reflect over y=x)	**8.G.2/3/4 - Demonstrate that two figures are congruent or similar using the properties of rotations, reflections, translations, or dilations of 2D figures.**	Perform all four transformations (dilations, translations, rotations, and reflections) on two-dimensional figures using coordinates.	**Part C** **17 Days** **Unit Dates:** **April 10 - May 15** **Benchmark Dates:** **May 9 - May 15** **Trimester #3**
N/A	**6.LT.0 - Demonstrate the ability to retain content knowledge over time.** **Demonstrate the ability to retain content knowledge when solving problems with equations.**	Demonstrate ability to partially retain content knowledge over time.	
Non-Priority Targets			
	6.G.1/6.G.3 - Find the area of irregular polygons, with fractional sides, using composition and decomposition in real world contexts.		
	8.G.1 - Verify experimentally the properties of rotations, reflections, and translations as lines are taken to lines, angles to angles, and parallel lines are taken to parallel lines.		
	8.G.6 - Explain a proof of the Pythagorean Theorem and its converse.		