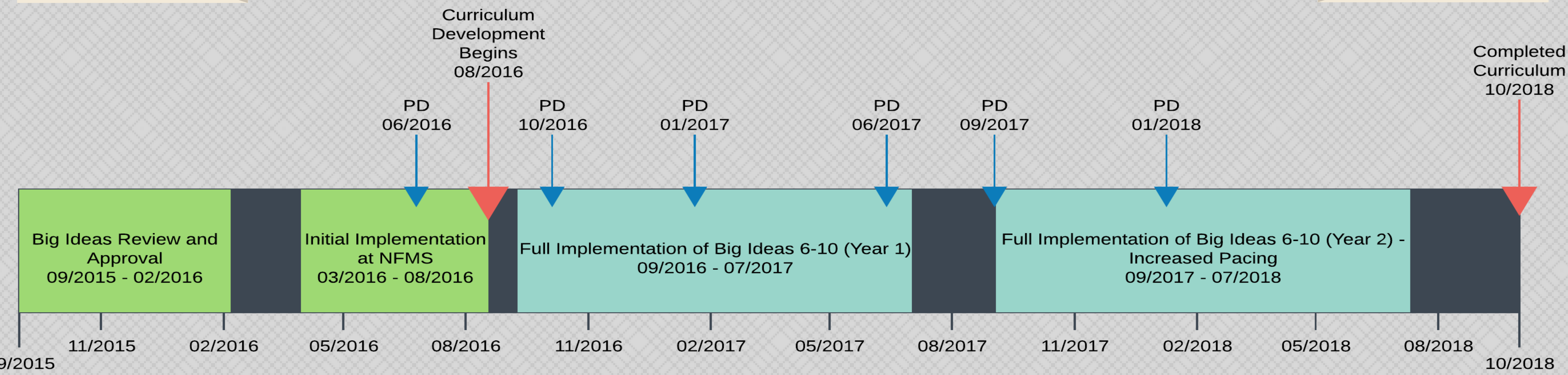


Secondary Mathematics Curriculum Update



August 27, 2018

Implementation Timeline

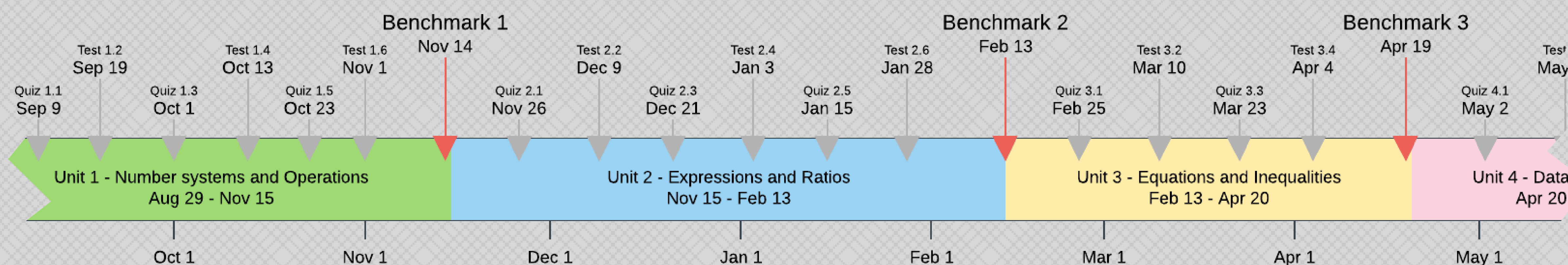


Curriculum Components

Pacing Guides

Content	Timeframe ¹
<u>Unit 1 - Number System and Operations</u>	6.5 Weeks (16 Blocks)
Integers (6.1) and Comparing and Ordering Integers (6.2)	½ Block
Fractions and Decimals on the Number Line (6.3)	½ Block
Quiz 1.1 (6.1-6.3)	½ Block
Absolute Value (6.4)	½ Block

Course and Assessment Timelines



Detailed Unit Documents

MATHEMATICS	
Course:	Algebra 1
Title:	Solving Linear Equations and Inequalities
Unit:	
Pacing:	
Unit Description	This unit is comprised of solving equations and inequalities, including absolute value equations and formulas, compound inequalities, and absolute value inequalities.
Essential Questions	<p>How can we use simple equations to solve real life problems?</p> <p>How can we use multi-step equations to solve real life problems?</p> <p>How can you solve an equation that has variables on both sides?</p> <p>How can you solve an absolute value equation?</p> <p>How can you use a formula for one measurement to get a formula for a different measurement?</p> <p>How can you use an inequality to describe a real-life statement?</p> <p>How can you use addition or subtraction to solve an inequality?</p> <p>How can you use division to solve an inequality?</p> <p>How can you solve a multi-step inequality?</p> <p>How can you use inequalities to describe intervals on the real number line?</p> <p>How can you solve an absolute value inequality?</p>
Big Ideas / Enduring Understandings	<p>I can...</p> <ul style="list-style-type: none"> Solve linear equations using addition and subtraction. Solve linear equations using multiplication and division. Use linear equations to solve real-life problems. Solve multi-step linear equations using inverse operations. Use multi-step linear equations to solve real-life problems. Use unit analysis to model real-life problems. Solve linear equations that have variables on both sides. Identify special solutions of linear equations. Solve absolute value equations. Solve equations involving two absolute values. Identify special solutions of absolute value equations. Rewrite literal equations. Rewrite and use formulas for area. Rewrite and use other common formulas. Write linear inequalities. Sketch the graphs of linear inequalities. Write linear inequalities from graphs.

Solving Inequalities (2.1)	<ol style="list-style-type: none"> Write linear inequalities. Sketch the graphs of linear inequalities. Write linear inequalities from graphs. 	How can you use an inequality to describe a real-life statement?	
Solving Inequalities Using Addition or Subtraction (2.2)	<p>I can...</p> <ol style="list-style-type: none"> Solve inequalities using addition. Solve inequalities using subtraction. Use inequalities to solve real-life problems. 	How can you use addition or subtraction to solve an inequality?	HS.A-1.3
Solving Inequalities Using Multiplication or Division (2.3)	<p>I can...</p> <ol style="list-style-type: none"> Solve inequalities by multiplying or dividing by positive numbers. Solve inequalities by multiplying or dividing by negative numbers. Use inequalities to solve real-life problems. 	How can you use division to solve an inequality?	HS.A-1.3
Solving Multi-Step Inequalities (2.4)	<p>I can...</p> <ol style="list-style-type: none"> Solve multi-step inequalities. Use multi-step inequalities to solve real-life problems. 	How can you solve a multi-step inequality?	HS.A-1.3

Assessments and Performance Tasks

Grade **7** Benchmark 1

- Which inequality is represented by the graph shown below?

A. <table border="1" style="background-color: black; width: 40px; height: 15px; display: inline-table;"></table>	C. <table border="1" style="background-color: black; width: 40px; height: 15px; display: inline-table;"></table>
B. <table border="1" style="background-color: black; width: 40px; height: 15px; display: inline-table;"></table>	D. <table border="1" style="background-color: black; width: 40px; height: 15px; display: inline-table;"></table>
- Which of the following decimals is equivalent to $\frac{1}{4}$?

A. <table border="1" style="background-color: black; width: 40px; height: 15px; display: inline-table;"></table>	C. <table border="1" style="background-color: black; width: 40px; height: 15px; display: inline-table;"></table>
B. <table border="1" style="background-color: black; width: 40px; height: 15px; display: inline-table;"></table>	D. <table border="1" style="background-color: black; width: 40px; height: 15px; display: inline-table;"></table>
- GRIDDED RESPONSE:** Two inequalities are shown below. How many times more is the portion of time spent going on rides than the portion of time spent playing games? Justify your answer.

Amusement Park

How many times more is the portion of time spent going on rides than the portion of time spent playing games? Justify your answer.

	Portion of your time
Going on rides	$\frac{1}{6}$
Waiting in line for rides	$\frac{3}{10}$
Playing games	$\frac{1}{12}$
Swimming in wave pool	$\frac{3}{10}$

Middle School Units

	Grade 6 Academic	Grade 6 Advanced 1	Grade 7 Academic	Grade 7 Advanced 2	Grade 7 Accelerated	Grade 8 Academic	Grade 8 Algebra 1
Unit 1	Number Systems and Operations	Number Systems and Operations	Real Numbers	Equations and Inequalities	Operations with Integers and Rational Numbers	Equations	Linear Equations
Unit 2	Expressions and Ratios	algebraic Expressions and Applications	Pre-Algebra	Geometry	Pre-Algebra	Geometric Transformations	Linear Inequalities
Unit 3	Equations and Inequalities	Equations and Inequalities	Ratios, Proportions, and Percents	Transformations and Congruence	Ratios, Proportions, and Percents	Linear Equations and Functions	Systems of Linear Equations
Unit 4	Data and Statistics	Data and Statistics	Geometry	Linear Equations and Functions	Geometry	Statistics	Linear and Exponential Functions
Unit 5		Proportions and Percents	Probability and Statistics	Pythagorean Theorem and Applications	Surface Area and Volume	Systems of Linear Equations	Square Roots and the Pythagorean Theorem
Unit 6		Real Numbers		Probability and Statistics	Probability and Statistics	The Pythagorean Theorem and Geometry	Polynomials and Quadratic Functions
Unit 7		Expressions and Equations		Exponents and Scientific Notation	Transformations and Congruence	Exponents and Scientific Notation	Data Analysis and Displays
Unit 8					Graphing and Writing Linear Equations	Lines, Angles, and Triangles	Rational Equations and Functions
Unit 9					Roots, Exponents, and the Pythagorean Theorem		

High School Units

	Algebra 1	Geometry	Algebra 2
Unit 1	Solving Linear Equations and Inequalities	Geometry Basics and Proofs	Function Transformations
Unit 2	Linear Functions	Lines and Transformations	Quadratic Functions
Unit 3	Data and Statistics	Triangles	Polynomial Functions
Unit 4	Solving Systems of Linear Equations	Quadrilaterals and Other Polygons	Radical and Logarithmic Functions
Unit 5	Polynomial Equations and Factoring	Similarity and Trigonometry	Statistics and Probability
Unit 6	Graphing and Solving Quadratic Functions	Circles and Measurement	Rational and Recursive Functions
Unit 7	Exponential and Radical Functions		