

## National HSMS Algebra 2 2019-2020 MATHia Enhancements Release Notes

Module		Topic	MATHia Unit	Workspace	Description	Enhancement
1	Analyzing Structure	Exploring and Analyzing Patterns	Graphs of Polynomial Functions	Comparing Polynomial Functions in Different Forms	Given two polynomial functions in different representations -- equation, graph, table, or description -- with a contextual or non-contextual scenario, students compare the functions' degrees, extrema, rates of change, or zeros over a specific interval.	NEW LOCATION: Previously in the <i>Solving Polynomial Inequalities</i> unit
2	Developing Structural Similarities	Relating Factors and Zeros	Polynomial Operations	Using a Factor Table to Multiply Polynomials	Students use factor tables to multiply polynomials. Students combine like terms.	NEW LOCATION: Previously in the Algebra I sequence.
		Justifying Line and Angle Relationships	Introduction to Proofs with Segments and Angles	Multiplying Polynomials	Students determine which factor table is appropriate for a given problem, set up the table, and then use the table to multiply polynomials.	NEW LOCATION: This workspace was transposed with <b>Connecting Steps in Angle Proofs</b> .
				Connecting Steps in Angle Proofs	Students arrange the steps of more complex proofs into logical order.	NEW LOCATION: Previously in the Algebra I sequence.
				Solving Quadratic Equations by Factoring	Students solve quadratic equations by factoring and applying the zero-product property.	DUPLICATE: This Mastery workspace is duplicated here from A1 to set the stage for what the students are doing next.
		Polynomial Models	Polynomial Models	Pascal's Triangle		NEW: This is a new Concept Builder workspace.
				Binomial Theorem		NEW: This is a new Concept Builder workspace.
		Using Congruence Theorems	NEW UNIT: Extending Triangle	Solving Polynomial Inequalities	Students solve polynomial inequalities graphically. In all cases, they solve inequalities written as greater than or less than zero. The worked example	NEW LOCATION: Previously in the <i>Solving Polynomials</i> unit

## National HSMS Algebra 2 2019-2020 MATHia Enhancements Release Notes

Module		Topic	MATHia Unit	Workspace	Description	Enhancement
			Congruence Theorems		demonstrates to separate the left hand side and right hand side of the inequality into two separate equations. From there, the equations are graphed, and students visually inspect where the graph lies above or below the x-axis. Initially, students select the regions of the graph that make the inequality true directly on the graph. After some practice, they must also select the intervals for x that are solutions to the inequality.	
3	]		Rational Expressions and Equations	Adding and Subtracting Rational Expressions	Students simplify sums and differences of rational expressions.	NEW LOCATION: <b>Adding and Subtracting Rational Expressions</b> and <b>Multiplying and Dividing Rational Expressions</b> were transposed.
				Multiplying and Dividing Rational Expressions	Students simplify products and quotients of rational expressions.	NEW LOCATION: <b>Adding and Subtracting Rational Expressions</b> and <b>Multiplying and Dividing Rational Expressions</b> were transposed.
	Investigating Periodic Functions	Trigonometric Equations	Solving Trigonometric Equations	Solving Sine and Cosine Equations (No Type In)		NEW: This is a new Mastery workspace.
				Solving Tangent Equations (No Type In)		NEW: This is a new Mastery workspace.

National HSMS Algebra 2  
2019-2020 MATHia Enhancements Release Notes

---

Module	Topic	MATHia Unit	Workspace	Description	Enhancement
			Solving Tangent, Sine, and Cosine Equations (No Type In)		NEW: This is a new Mastery workspace.