

# Math Curriculum Map for Foundations of Algebra

	February	March	April	May	June	
Unit Name or Theme	ADDITION AND SUBTRACTION OF ALGEBRAIC FRACTIONS	MULTIPLICATION AND DIVISION OF ALGEBRAIC FRACTIONS	RATIONAL NUMBERS	RATIO, PROPORTION AND PERCENT >>	<<	Unit Name or Theme
Enduring Understandings and Performance Indicators	<p>Fractions can be added and subtracted within an algebraic equation</p> <p>Numbers can be additive inverses</p> <p>Properties of operations are strategies to add and subtract rational numbers</p>	<p>Fractions can be multiplied and divided within algebraic equations</p> <p>Multiplication is extended from fractions to rational numbers</p> <p>Rules exist for multiplying signed numbers</p> <p>Multiplication is extended from fractions to rational numbers</p>	<p>Numerical operations can be applied to rational numbers</p> <p>Quantities can be combined to make 0</p> <p>Properties of operations are strategies to solve equations with rational numbers</p>	<p>Fractions can be converted to percents</p> <p>Unit rates are associated with ratios of fractions</p>	<p>Proportional relationships exist between quantities</p> <p>Proportional relationships can assist in solving multistep ratio and percent problems</p>	Enduring Understandings and Performance Indicators
Essential Questions	<p>How can I add or subtract fractions within an equation?</p>	<p>How can I multiply and divide rational numbers?</p>	<p>How can opposite quantities be combined to make 0?</p>	<p>How can I represent fractions with decimals or percents?</p> <p>How are unit rates associated with ratios of fractions?</p>	<p>What relationships are shared among ratios?</p> <p>What relationships are shared among proportions?</p> <p>How can I solve a multistep problem with proportional relationships?</p>	Essential Questions
Assessment Strategies Formative & Summative	<p>Quizzes</p> <p>Tests</p> <p>Group projects</p> <p>Paper/pencil class work</p> <p>Homework</p> <p>Heath's Foundations of Algebra</p>	<p>Heath's Foundations of Algebra</p> <p>Paper/pencil class work</p> <p>Homework</p>	<p>Heath's Foundations of Algebra</p> <p>Paper/pencil class work</p> <p>Homework</p>	<p>Heath's Foundations of Algebra</p> <p>Paper/pencil class work</p> <p>Homework</p>	<p>Heath's Foundations of Algebra</p> <p>Paper/pencil class work</p> <p>Homework</p>	Assessment Strategies Formative & Summative

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Instructional Skills and Strategies	<p><b>Instructional Skills and Strategies:</b> Write whole numbers, fractions and mixed numbers</p> <p>Add and subtract fractions with like denominators</p> <p>Add and subtract fractions with unlike denominators</p> <p>Add and subtract fractions and mixed numbers</p> <p>Show that a number and its opposite have a sum of 0</p> <p>Apply properties of operations as strategies to add and subtract rational numbers</p>	<p><b>Instructional Skills and Strategies:</b> Multiply and divide mixed numbers</p> <p>Multiply and divide algebraic fractions</p> <p>Find missing numbers</p> <p>Apply and extend multiplication and division and of fractions to multiply and divide rational numbers</p> <p>Apply properties of operations as strategies to multiply and divide rational numbers</p>	<p><b>Instructional Skills and Strategies:</b> Add and subtract rational numbers</p> <p>Multiply and divide rational numbers</p> <p>Solve equations with rational solutions</p> <p>Solve real world and mathematical problems involving the four operations with rational numbers</p>	<p><b>Instructional Skills and Strategies:</b> Identify percentage of a number</p> <p>Find number when the percentage is known</p> <p>Find percentage increase or decrease</p> <p>Estimate with percentages</p> <p>Solve percent problems</p> <p>Use concrete objects to represent fractions and percentages</p> <p>Convert fractions to decimals and percents</p>	<p><b>Instructional Skills and Strategies:</b> Describe ratio relationships between two or more quantities</p> <p>Use ratios to solve real world problems</p> <p>Solve problems with ratios and proportions</p> <p>Shade, construct, deconstruct ratios</p> <p>Identify proportions</p> <p>Use proportional relationships to solve multistep ratio and percent problems</p>	Instructional Skills and Strategies
Primary Resources	Heath's Foundations of Algebra	Heath's Foundations of Algebra	Heath's Foundations of Algebra	Heath's Foundations of Algebra	Heath's Foundations of Algebra	Primary Resources
Links with CCSS/NCTM	CCSS 7.NS.1abcd NCTM Algebra, Number and Operations, Problem Solving, Communication, Connection, Representation, Reasoning and Proof	CCSS 7.NS.2abcd NCTM Algebra, Number and Operations, Problem Solving, Communication, Connections, Representation, Reasoning and Proof	CCSS 7.NS.1, 7.NS.3 NCTM Algebra, Communication, Connections, Representation, Reasoning and Proof	CCSS 7.RP.1 NCTM Problem Solving, Reasoning and Proof, Communication, Connections, Representation	CCSS 7.RP.2, 7.RP.2 NCTM Data Analysis and Probability, Problem Solving, Communication, Connections, Representation, Reasoning and Proof	Links with CCSS/NCTM