

Subject	6th Grade	7th Grade	8th Grade	Algebra I	
Ideas students are learning	Finding Factors and Products, Finding Whole Number Patterns and Relationships, Finding Common Multiples and Common Factors, Using Fractions	Multiplying Fractions, Dividing Fractions, Using Variables, Tables, and Coordinate Graphs, Analyzing Graphs and Tables	Exploring Rates, Exploring Linear Functions with Graphs and Tables, Solving Equations, Exploring Slope	Foundations for Functions, Solving Equations, Proportions and Similar Figures	
Skills	Give Factors and Multiples of a Whole Number, Give Common Factors and Common Multiples of Number Pairs, Use Fractions	Multiply Fractions, Divide Fractions, Use Variables in Tables, and Coordinate Graphs, Analyze Graphs and Tables	Use Rates to Describe Situations, Explore Linear Functions with Graphs and Tables, Solve Equations, Explore Slope of a Line	Recognize a function, solve one-variable equations, use proportions to solve problems and similar figures	
Work and assignments to look for	Student Notebook, Application, Connection, and Extension Problems, Mathematical Reflection for each Investigation, My Special Number Project	Student Notebook, Application, Connection, and Extension Problems, Mathematical Reflection for each Investigation	Student Notebook, Application, Connection, and Extension Problems, Mathematical Reflection for each Investigation	Calculator Explorations, Graphing for All, Pre and Post Test for Solving Equations, Proportionality and Similar Figures	
Questions Parents Can Ask	What are factors of a number? What are multiples of a number? How does my knowledge of factors and multiples help me know my multiplication facts? How do we use fractions?	How can you model multiplication and division of fractions? How do the models relate to the algorithms of the operations? How are variables used in tables and graphs?	How do you use rates to describe situations? How are rates and the slope of a line similar? What are multiple representations of an equation?	What is a function?, What is meant by domain and range?, What is the difference between an algebraic expression and an equation?, How do you use proportions to solve problems?	
Special Notes	Students are expected to talk and write about their mathematical thinking. They will be asked to justify their answers. They will also be asked to display their answers in a variety of formats.	Students are expected to talk and write about their mathematical thinking. They will be asked to justify their answers. They will also be asked to display their answers in a variety of formats.	Students are expected to talk and write about their mathematical thinking. They will be asked to justify their answers. They will also be asked to display their answers in a variety of formats.	Students are expected to talk and write about their mathematical thinking. They will be asked to justify their answers. They will also be asked to display their answers in a variety of formats.	