Houghton Mifflin Harcourt™

Scope and Sequence Matrix
Grades 6–8

GO MATH
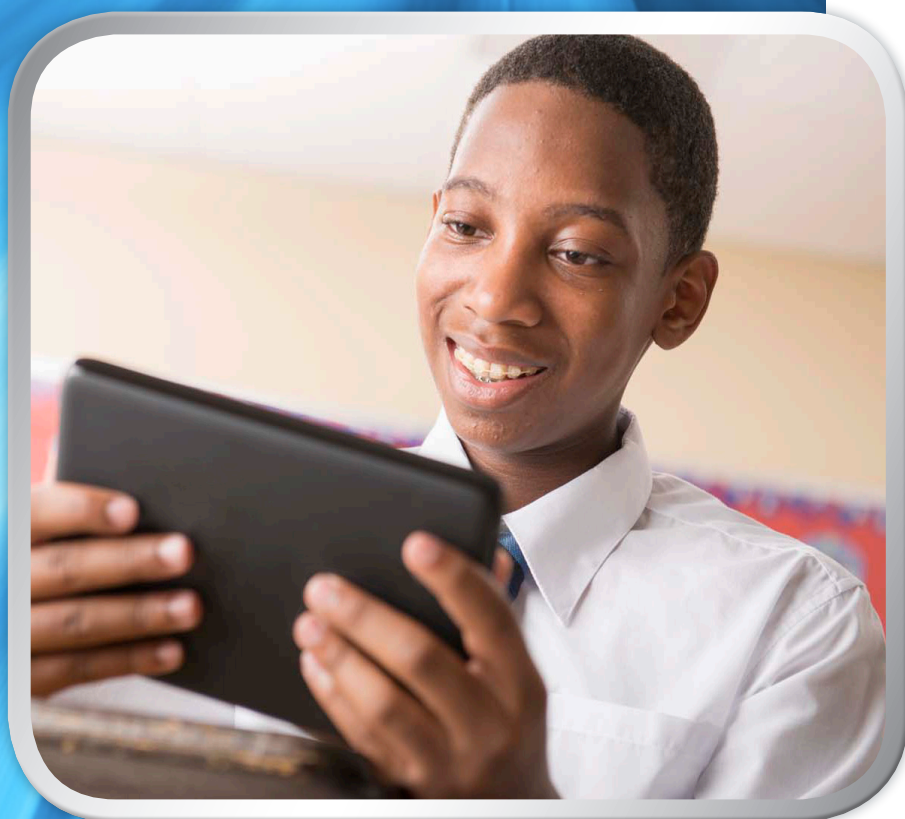
On the Go Student Success!

	6	7	8
Ratios and Proportional Relationships (RP)			
Concept of Ratio			
Fractions and ratio	●	●	◆
Model ratios	●	◆	
Notation for ratio	●	◆	◆
Rate language	●	◆	◆
Unit rates and ratios	●	●	◆
Write ratios	●	◆	◆
Proportional Relationships			
Equations		●	●
Multistep problems		●	◆
Relationship between two quantities		●	●
Rate and Ratio Reasoning			
Constant of proportionality		●	◆
Convert measurements	●		
Distance, rate, time formula	●	◆	◆
Equivalent ratios	●	◆	◆
Percent	●		
Real-world problems	●	◆	◆
Unit rate	●	●	◆
The Number System (NS)			
Addition and Subtraction of Decimals			
Add decimals	●		
Subtract decimals	●		
Common Factors and Multiples			
Greatest common factor	●		
Least common multiple	●		◆
Prime factorization	●		
Division with Fractions			
Divide fractions	●		
Divide mixed numbers	●		
Reciprocal and inverse operations	●		
Visual fraction models	●		
Division with Whole Numbers and Decimals			
Divide decimals	●		
Divide whole numbers	●		

● **Investigate and Analyze** ◆ **Apply and Extend**

	6	7	8
Irrational numbers			
Decimal expansion			●
Estimate			●
Rational approximations			●
Sets of real numbers			●
Multiplication			
Multiply decimals	●		
Rational Numbers			
Absolute value	●	◆	
Addition and subtraction		●	
Compare and order rational numbers	●	◆	
Decimals	●	●	◆
Distance with rational numbers	●		
Graph on the coordinate plane	●		
Multiplication and division	●	●	
Negative and positive numbers	●	●	
On the number line	●	●	
Opposites	●	◆	
Real-world problems	●	●	●
Reflection on the axes	●		
Expressions and Equations (EE)			
Algebraic Expressions			
Equivalent algebraic expressions	●	●	◆
Evaluate algebraic expressions	●	◆	◆
Identify parts of expressions	●	◆	◆
Model algebraic expressions	●	●	◆
Properties of operations		●	◆
Rewrite expressions		●	◆
Write algebraic expressions	●	●	◆
Equations			
Analyze relationships	●	◆	◆
Collect like terms		●	●
Dependent and independent variables	●	◆	◆
Determine solution sets			●
Expand expressions using Distributive Property		●	●
Express relationships	●	◆	◆
Graph relationships	●	●	●

● **Investigate and Analyze**   ◆ **Apply and Extend**

	6	7	8
Linear equations	●	●	●
Linear equations on the coordinate plane	●	●	●
Meaning of equality	●		
Model equations	●	●	◆
Multistep problems with positive and negative numbers		●	◆
One-variable equations	●	●	●
Pairs of simultaneous linear equations			●
Rational number coefficients			●
Real-world problems		●	◆
Symbols showing relations	●		
Translate between equations and table values	●		
Inequalities			
Graph inequalities with one variable	●	●	
Identify solutions	●	●	
Real-world problems	●	●	
Solutions of inequalities on a number line	●	●	
Solutions of inequalities using substitution	●	●	
Symbols showing relations	●	●	
Write inequalities	●	●	
Integer exponents			
Properties			●
Scientific notation			●
Numerical Expressions			
Evaluate numerical expressions	●	◆	
Write numerical expressions	●	◆	
Proportional Relationships			
Equations		●	●
Graph proportional relationships			●
Multistep ratio problems			●
Relationship between two quantities		●	●
Slope			●
Radicals			
Cube root			●
Square root			●
Functions (F)			
Functions			
Analyze functions			●
Compare two function representations			●

● **Investigate and Analyze**　◆ **Apply and Extend**

	6	7	8
Construct functions			●
Define a function			●
Function graphs			●
Geometry (G)			
Angles			
Angle sum			●
Angle-angle criterion for triangle symmetry			●
Angles formed by transversal			●
Equations to find unknown angle	●	●	●
Exterior angle of triangles			●
Multistep problems to find unknown angles		●	●
Types of angles		●	●
Area			
Area of a circle		●	
Area of a composite figure	●	●	
Area of a parallelogram	●	●	
Area of a polygon	●	●	
Area of a trapezoid	●	●	
Area of a triangle	●	●	
Changing dimensions and area	●		
Distance on the coordinate plane	●		
Draw polygons on the coordinate plane	●		
Formulas for area	●	●	◆
Real-world problems	●	●	◆
Side lengths on the coordinate plane	●		
Circumference			
Find circumference		●	
Formula for circumference		●	
Congruence and Similarity			
Describe a sequence			●
Transformations			●
Cross Sections			
Right rectangular prisms		●	
Right rectangular pyramids		●	
Geometric Shapes			
Construct triangles		●	◆
Draw geometric shapes		●	◆

● **Investigate and Analyze**   ◆ **Apply and Extend**

	6	7	8
Pythagorean Theorem			
Distance between two points			●
Proof			●
Real-world problems in two- and three-dimensions			●
Unknown side lengths of right triangles			●
Scale Drawings			
Compute lengths		●	●
Find area		●	
Reproduce at different scale		●	●
Surface Area			
Nets	●	●	
Real-world problems	●	●	
Surface area of a composite solid		●	
Surface area of a cube	●	◆	
Surface area of a prism	●	●	
Surface area of a pyramid	●		
Three-Dimensional Figures			
Right rectangular prisms		●	
Right rectangular pyramids		●	
Volume			
Formula for volume	●	●	●
Fractional side lengths and volume	●		
Real-world problems	●	●	●
Use cubes to find volume	●		●
Volume of a composite solid		●	
Volume of a cone			●
Volume of a cylinder			●
Volume of a rectangular prism	●	◆	
Volume of a sphere			●
Volume of a trapezoidal prism		●	
Volume of a triangular prism		●	
Statistics and Probability (SP)			
Bivariate Data			
Equation of a linear model			●
Scatter plot			●
Two-way table			●

● **Investigate and Analyze**　◆ **Apply and Extend**

	6	7	8
Compare Data			
Comparative inference		●	◆
Display Data			
Box plot	●	◆	
Dot plot	●	◆	
Frequency table	●	◆	◆
Histogram	●		
Two-way frequency table			●
Probability			
Compound events		●	
Probability model		●	
Probability of chance event		●	
Statistical Questions			
Describe data collections	●	●	
Distribution of data	●	●	
Measure of center	●	●	
Measure of variation	●		
Recognize statistical questions	●		
Statistical Samples			
Random samples		●	
Representative samples		●	
Validity		●	
Summarize Data			
Box plot	●	●	
Describe data collections	●	●	●
Describe distributions	●	●	●
Dot plot	●	●	
Effects of outliers	●	◆	●
Frequency table	●	◆	◆
Histogram	●		
Interpret data displays	●	●	●
Measures of central tendency	●	●	
Measures of variability	●	●	
Multiples of variability		●	

● **Investigate and Analyze** ◆ **Apply and Extend**

Regular

GO MATH — Middle School Grade 6

GO MATH — Middle School Grade 7

GO MATH — Middle School Grade 8

Accelerated

GO MATH — Middle School Grade 6

GO MATH — Middle School Accelerated Grade 7

ALGEBRA 1 — Analyze • Connect • Explore
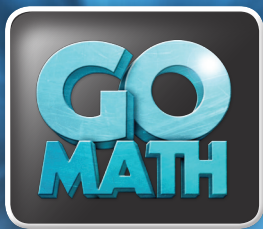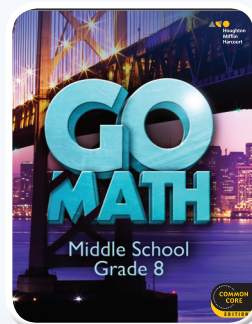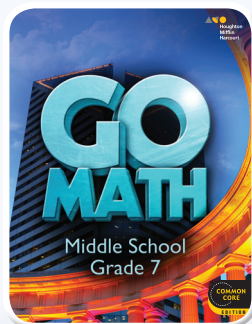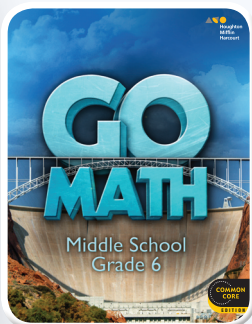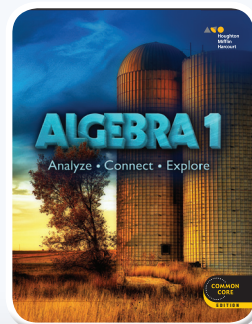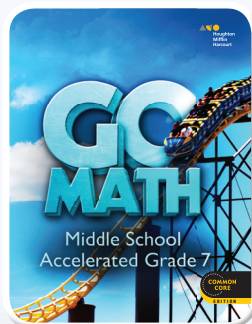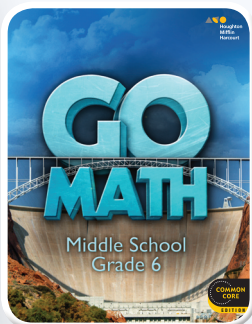
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