

# GOOD SHEPHERD EPISCOPAL SCHOOL

## 7<sup>th</sup> Grade Math Year at a Glance

Trimester	Month	Topics	Skills
First Trimester	August	Introduction Expectations Diagnostic Assessment	
	September	Chapter 1: Algebraic Expressions and Integers  Chapter 2: Solving One-Step Equations and Inequalities	Variables and Expression M Order of Operations R Integers M Absolute Values R Adding and Subtracting Integers M Multiplying and Dividing Integers M Coordinate Plane M  Properties of Numbers I Distributive Property R Simplifying Variable Expressions R/M Variables and Equations I/R Adding and Subtracting Equations w/ Variables M Multiplying and Dividing Equations w/ Variables M Graphing Inequalities M One-Step Inequalities by Addition/Subtraction M One-Step Inequalities by Multiplying/Dividing M
	October	Chapter 3: Decimals and Equations  Chapter 4: Factors, Fractions, and Exponents	Rounding and Estimating M Estimating Decimal Products and Quotients M Mean, Median, and Mode M Formulas: Distance, Temperature, Perimeter I Equations by Adding and Subtracting Decimals with negative numbers I/R Equations by Multiplying and Dividing Decimals with negative numbers I/R Metric System R/M  Divisibility and Factors M Exponents R Prime Factorization M Greatest Common Factor M

			Simplifying Fractions M Rational Numbers R Multiplication with Exponents I/R Division with Exponents I/R Scientific Notations I
Second Trimester	November/ December	Chapter 5: Operations with Fractions	Comparing and Ordering Rational Numbers R Adding and Subtracting Fractions M Multiplying and Dividing Fractions M Customary Units of Measurement M Powers of Products and Quotients R
	January	Chapter 6: Ratios, Proportions, and Percents	Ratios M Unit Rates M Proportions I/R Similar Figures R Scale Drawings M Fractions, Decimals, and Percent M Percent of Change I/R Percent of Markups and Percent of Discount I Dimensional Analysis R Equations and Proportions to Part or Whole R Counting Outcomes, Theoretical Probability I/R
	January/ February	Chapter 7: Solving Equations and Inequalities	Two-Step Equations I Multi-Step Equations R Equations with Variables on Both Sides I Two-Step Inequalities I Transforming Formulas R Simple and Compound Interest I
Second Trimester	February/ March	Chapter 8: Linear Functions and Graphing  Chapter 9: Spatial Thinking	Relations and Functions I Slope and Y-Intercept I Rules for Linear Functions I Scatter Plots R Solving Equations by Graphing I Systems of Linear Equations R Graphing Linear Inequalities R  Points, Lines, and Planes M Angle Relationships and Parallel Lines M Classifying Polygons M

			Congruence M Constructing Angle Segments and Bisectors M Circles - Circumference and Central Angles M Symmetry M Translations, Reflections, and Rotations M
Third Trimester	March	Chapter 10: Area and Volume	Area of : Parallelograms, Triangles, Trapezoids, Circles M Surface Area and Volume of: Prisms, Cylinders, Pyramids, Cones, Spheres M
	April	Chapter 11: Right Triangles	Square Roots and Irrational Numbers I Pythagorean Theorem I Distance and Midpoint Formulas I/R Special Right Triangles M
	May	Chapter 12: Data Analysis and Probability	Frequency Tables, Line Plots, and Histograms I Box-and-Whisker Plots I Counting Outcomes, Theoretical Probability I/R Independent and Dependent Events I/R Permutations and Combinations I/R Experimental Probability I Random Samples and Surveys I

\* This YAG will change. It is meant only to provide a quick look at the topics that will be addressed during the school year. Class progress, ERB testing, school trips, and inclement weather will all merit YAG adjustments.

\*\*Omitted Chapter 13 on Nonlinear Functions

\*\*\* I = Introduced  
 R = Reinforced  
 M = Mastered