# GOOD SHEPHERD EPISCOPAL SCHOOL

### 8<sup>TH</sup> GRADE MATH YEAR AT A GLANCE

Trimester	Month	Topics	Skills
First Trimester	August	COE: Colorado	
	September	Introduction Expectations Diagnostic Assessment Review Intro to Algebra Integers and Rational Numbers	Symbols and Expressions Commutative and Identity Properties Exponential Notation Associative Properties Distributive Property of Multiplication over Addition Writing Expressions and Solving Equations Evaluating Formulas Integers and the Number Line Rational Numbers Addition and Subtraction of Rational Numbers Multiplication and Division of Rational Numbers Using the Distributive Property
	October	Integers and Rational Numbers Equations Proportions ERBs	Inverse of a Sum and Simplifying Writing Equations Addition Property of Equality Multiplication Property of Equality Combining Like Terms Expressions and Equations Variables on Both Sides of the Equal Sign Clearing an Equation of Fractions and Decimals Formulas Solving Equations Involving Absolute Value Proportions Using Percent Translating Compound Phrases into Algebraic Expressions

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Second Trimester	November (End of First Trimester/ Beginning of Second Trimester)	Inequalities Exponents and Polynomials	Inequalities and their Graphs Addition Property of Inequalities Multiplication Property of Inequalities Translating and Solving Inequalities Multiplying and Dividing in Exponential Form Finding Powers of Powers Finding Powers of Products and Quotients Multiplying and Dividing Monomials Scientific Notation Simplifying and Evaluating Polynomials Adding Polynomials
	December	Exponents and Polynomials	Subtraction of Polynomials  Multiplication of Monomials and  Binomials  Multiplying Binomials: Special  Products  Multiplying Polynomials
	January	Factoring Polynomials	Factoring Monomials Differences of Two Squares Trinomial Squares Factoring x² + bx + c Factoring ax² + bx + c Factoring by Grouping Using Equations that Factor
	February	Rational Expressions	Simplifying Rational Expressions Multiplying Rational Expressions Dividing Rational Expressions Addition and Subtraction with Like/Unlike Denominators Solving Rational Equations Using Rational Equations Mixture Problems

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Third Trimester	March	Rational Expressions Graphs and Linear Equations	Dividing Polynomials Complex Rational Expressions Graphing Ordered Pairs Graphing Equations Using Tables Graphing Using Intercepts Horizontal and Vertical Lines Finding Slope Given Two Points Graphing Using Slope-Intercept Form Finding an Equation of a Line Using Point-Slope Formula Fitting Equations to Data Using Line of Best Fit
	April	Graphs and Linear Equations Systems of Linear Equations	Parallel and Perpendicular Lines Domain and Range of Linear Functions "Linear Programming" Project Solving Systems of Equations by Graphing The Substitution Method The Addition (Substitution) Method Using Systems of Equations
	May	Systems of Equations Inequalities and Absolute Value Review Exam	Motion Problems Digit and Coin Problems Sets, Intersections, and Unions Compound Sentences Equations and Absolute Value Inequalities and Absolute Value Inequalities in Two Variables Graphing Systems of Linear Inequalities

<sup>\*</sup> 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.