Unit 1: Expressions, Equations, & Inequalities

Name: \_\_\_\_\_

Graduation Competencies	Learning Targets	Practice for Mastery		Evidence of Mastery
	You CAN complete as many as you choose to		s many as you choose to	You MUST complete and
		reach the learning targets		submit these for a grade.
Competency #3: The student creates, interprets, uses, and analyzes patterns of algebraic structures to make sense of problems.  Math 8 Performance Indicators:  3a. Apply and extend previous understandings of arithmetic to algebraic expressions.  3b. Reason about and solve one-variable equations and inequalities.  3d. Use properties of operations to generate equivalent expressions.  3e. Solve real-life and mathematical problems using numerical and algebraic expressions and equations.  Coordinate Algebra Performance Indicators:  3a. The student interprets the structure of expressions and writes expressions in equivalent forms to solve problems.  3b. The student performs arithmetic operations on polynomials, understands the relationship between zeros and factors of polynomials, uses polynomial problems and rewrites rational expressions.  3c. The student creates equations that describe numbers or relationships.  3d. The student understands, represents a and inequalities in one variable both alge graphically.	☐ I can identify the parts of an expression ☐ I can apply the properties of operations to write equivalent expressions ☐ I can identify and describe the properties of operations & properties of equalities ☐ I can justify my steps when solving an equation ☐ I can solve a multi-step equation in one variable ☐ I can translate a verbal statement to an algebraic statement	<ul> <li>Direct         Instruction with         the teacher</li> <li>Small Group         Instruction</li> <li>Practice Sheets         &amp; Graphic         Organizers</li> <li>Equation Maze         or Solve &amp; Scan         QR Code (in         class)</li> <li>Card Sorts-         matching         properties with         examples</li> <li>Green         Workbook p         128-129</li> <li>Quizlet Deck for         Algebraic         Properties         <ul> <li>Quizlet Deck for</li> <li>Properties of</li> <li>Equality</li> <li>Quizlet Deck</li></ul></li></ul>	Learning Videos/Websites You should be take notes and working problems in your Learning Log while you watch the videos.  • Inverse Properties of Addition and Multiplication • Identity Properties of Addition and Multiplication • Understand what terms in expressions and equations represent • What makes expressions equivalent using properties  • Video Collection on Solving Two Step and Multi Step Equations • Equations with variables on both sides • Linear Equations with one variable	<ul> <li>Assessment on Justifying Solutions with Properties         <ul> <li>Sept 8</li> </ul> </li> <li>Assessment on Solving Multi-Step Equations-Sept 15</li> </ul>

•	<ul> <li>Quizlet Deck         Matching         Equivalent         Expressions</li> <li>Quizlet Deck         Practice         Evaluating         Expressions</li> <li>Quizlet Deck for         Order of         Operations</li> </ul>	<ul> <li>Analyzing the number of solutions to an equation</li> <li>Video Collection for Translating Between Words and Math</li> </ul>	
	<ul> <li>Practice Solving         Equations</li> <li>Coolmath         Solving         Equations         Exercises</li> <li>Practice test on         Solving         Multistep         Equations</li> <li>Practice         Translating and         Solving         Equations</li> <li>Practice test on         Equations</li> <li>Practice test on         Equations with         Variables on         Both sides         IXL-Solving         Equations</li> </ul>		
•	(FREE with limited daily access)  IXL- Create Equations with Infinitely Many or No Solutions (FREE with		

limited daily access)
IXL- How many solutions (FREE)
with limited daily access)  • Algebraic
<ul><li>Translations</li><li>Algebraic</li></ul>
<ul> <li>representations</li> <li>Practice with Algebraic</li> </ul>
translations