

UNIT OF STUDY

#2

Title: writing & simplifying algebraic expression	Subject/Course: 9 th Res. Math	Length: 2 weeks
Topic: combining like terms evaluating expression	Grade: 9th	Designer: K. Henderson
UNIT GOALS AND EXPECTATIONS		
IMPORTANT CONCEPTS/UNDERSTANDINGS: <ul style="list-style-type: none"> combining like terms evaluate expressions meaning of a coefficient [i.e. $3x = x + x + x$] meaning of a power [i.e. $x^3 = (x)(x)(x)$] integer arithmetic 	ESSENTIAL QUESTIONS: <ul style="list-style-type: none"> What is a like term? What is an constant? What is a variable, algebraic expression, term, and coefficient? How do you classify a polynomial? What is a square root? What is an absolute value? 	
STUDENT LEARNING EXPECTATIONS: <ul style="list-style-type: none"> LA.1.AI.1 – Evaluate algebraic expression, including radicals, by applying the order of operations. LA.1.AI.5 - Perform <i>polynomial</i> operations (addition, subtraction, multiplication) with and without manipulatives 		
SPECIFIC DECLARATIVE KNOWLEDGE – What I know Vocabulary words – integer, exponent, base, square root, order of operations, variable, algebraic expression, term, constant, radical sign, coefficient, monomial, binomial, trinomial, and like terms.	SPECIFIC PROCEDURAL KNOWLEDGE – What I need to do <ul style="list-style-type: none"> recognize like terms use like terms to simplify expressions. add and subtract polynomials both vertically and horizontally. evaluate algebraic expressions for given numerical values use the order of operations. remove parentheses that are preceded by "-" 	
UNIT ASSESSMENTS (Include tasks related to Dimensions 3 and 4 and Bloom's Taxonomy)		
open response question <ul style="list-style-type: none"> requiring the student to use the order of operations when combining like terms (application) evaluate expressions with real world application – formula for interest (application) 		

Traditional Assessments: independent practice worksheets Test warm-up or homework quizzes	Other Evidence of Learning: notes guided practice observation marker board review
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ACTIVITIES AND LEARNING EXPERIENCES	Resources
<p>1. 4 step vocabulary to introduce key words from the unit.</p> <p>2. Lesson 2.4 combining like terms – use example of fencing cows and wolves together.</p> <p>3. Lesson 2.5 – evaluating expression – replace the variable with the given number. * explain what happens when the absolute value bars are taken away. * what do you do when your problem looks like a fraction.</p> <p>4. marker board review – group review</p>	<p>4 step worksheet</p> <p>Algebra’s Cool DVD program Unit A</p> <p>Algebra’s Cool DVD program Unit A</p> <p>marker board & eraser</p>
Career Connections	
travel agent, train conductor, mover, farmer	