

## UNIT OF STUDY

#3

<b>Title:</b> solving linear equations of one variable <b>Subject/Course:</b> 9 <sup>th</sup> Res. Math <b>Length:</b> 2 weeks	
<b>Topic:</b> solve one step and multi step equations <b>Grade:</b> 9th <b>Designer:</b> K. Henderson	
<b>UNIT GOALS AND EXPECTATIONS</b>	
<b>IMPORTANT CONCEPTS/UNDERSTANDINGS:</b> <ul style="list-style-type: none"> <li>combining like terms</li> <li>inverse operations</li> <li>use of the distributive property</li> <li>how to determine the least common multiple by factorization</li> </ul>	<b>ESSENTIAL QUESTIONS:</b> <ul style="list-style-type: none"> <li>What is a coefficient?</li> <li>What is an equation?</li> <li>What is a solution?</li> <li>How do you use inverse operation?</li> <li>What does identity mean in math? [Identity for an operation or identity equation?]</li> <li>What is the distributive property?</li> <li>How do you find the least common multiple?</li> </ul>
<b>STUDENT LEARNING EXPECTATIONS:</b> <ul style="list-style-type: none"> <li>LA.1.AI.2 - Translate word phrases and sentences into <i>expressions, equations, and inequalities</i>, and vice versa</li> </ul> <p>*SEI.2.AI.1 - Solve multi-step equations and inequalities with rational <i>coefficients</i></p> <ul style="list-style-type: none"> <li>numerically (from a table or guess and check)</li> <li>algebraically (including the use of manipulatives)</li> <li>graphically</li> <li>technologically</li> </ul>	
<b>SPECIFIC DECLARATIVE KNOWLEDGE – What I know</b>  Vocabulary words – equation, solution, coefficient, inverse, multi step, identity, distributive, least common multiple.	<b>SPECIFIC PROCEDURAL KNOWLEDGE – What I need to do</b> <ul style="list-style-type: none"> <li>solve one step equation using add, subtract, multiply and divide using inverse operation and order of operations</li> <li>determine if a number is a solution for an equation.</li> </ul> <p>solve equations</p> <ul style="list-style-type: none"> <li>involving fractions</li> <li>using distributive property</li> <li>that are identities [identity equations]</li> <li>that have no solution</li> </ul>
<b>UNIT ASSESSMENTS</b>	
(Include tasks related to Dimensions 3 and 4 and Bloom’s Taxonomy)	
open response question <ul style="list-style-type: none"> <li>requiring the student to use multi step equations (application)</li> </ul>	

<b>Traditional Assessments:</b> independent practice worksheets Test warm-up or homework quizzes	<b>Other Evidence of Learning:</b> notes guided practice observation marker board review
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ACTIVITIES AND LEARNING EXPERIENCES	Resources
1. 4 step vocabulary to introduce key words from the unit. 2. Lesson 3.3 solve one step equations – use inverse operation “do the opposite” 3. Lesson 3.4 and 3.5 – solve multi step equations * remind about cows and wolves fenced together. * Use the Disney song “I like to move it” * Checking your work. *There is not always an answer. 4. marker board review – group review	4 step worksheet Algebra’s Cool DVD program Unit B  Algebra’s Cool DVD program Unit B  marker board & eraser

Career Connections
cashier, meteorologist, nurse, computer technician, statistical analyst