| Mrs. Logan Advanced Math Week 4: September 5-8 |  |  |  |  |  |
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| Module 2: One- and Two-Variable Equations Topic A: Solving One-Variable Equations and Inequalities |  |  |  |  |  |
|  | Monday September 4th | Tuesday September 5th | Wednesday September 6th | Thursday September 7th | Friday <br> September 8th |
| Lesson | NO SCHOOL FOR LABOR DAY! | Lesson 2: Using <br> Equivalent <br> Expressions to Solve <br> Equations | Lesson 3: Solving Equations | Lesson 4: Using Equations to Solve Inequalities | Lesson 5: Solving Problems Involving Equations and Inequalities |
| Pages |  | 27-41 | 43-58 | 59-74 | 75-91 |
| We will... |  | write and identify equivalent expressions and use them to solve problems. | engage in a puzzle activity that can help us improve our skills in solving. | explore strategies to solve inequalities. | solve inequalities, model situations with inequalities and equations and identify any restrictions to solution sets. |
| Bell Ringer |  | Writing Equivalent Expressions | Scavenger Hunt | Equations to Inequalities | Inequality and Equation Stations |
| Exit Ticket |  | Fewest Terms and Factoring | Solve and Check Solutions | Solve and Graph the Solution Set | Solve and Graph the Solution Set |
| I will... |  | generate equivalent expressions by using the properties of operations for linear expressions and solve equations in forms $p x+q=r$, and $p(x+q)=r$ where all variables are integers. | write and solve equations in forms $p x+q=r$, and $p(x+q)=r$ where all variables are rational numbers. | solve inequalities and graph their solution sets on a number line. | solve inequalities and identify restrictions to their solution sets and solve real-world problems using equations and inequalities. |
| Reminders |  |  | Today's Scavenger Hunt will be taken for a grade. |  |  |
|  | 7.EE.A.1. Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients to include multiple grouping symbols (e.g., parentheses, brackets, and braces). |  |  |  |  |
|  | 7.EE.A.2. Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. |  |  |  |  |
|  | 7.G.B.5. Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure. |  |  |  |  |
|  | 7.EE.B.4. Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. |  |  |  |  |
| State <br> Standards | 7.EE.B.4.a. Solve word problems leading to equations of the form $p x+q=r$ and $p(x+q)=r$, where $p, q$, and $r$ are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. |  |  |  |  |

8.EE.C.7.b Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.
7.EE.B.4.b. Solve word problems leading to inequalities of the form $p x+q>r, p x+q \geq r, p x+q<r$, or $p x+q \leq$ $r$, where $p, q$, and $r$ are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem.
8.EE.C.7.b. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.

