## Whiten/Fahnestock/White/Parker / Math 6 / Jan 8-12 --- Week 3-1

## Standard(s)

## Reason about and solve one-variable equations and inequalities.

MGSE6.EE.5 Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.

MGSE6.EE.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.

MGSE.6.EE.7 Solve real-world and mathematical problems by writing and solving equations of the form x+p=q and px=q for cases in which p, q and x are all nonnegative rational numbers.

MGSE.6.EE.8 Write an inequality of the form x<c or x>c to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form x<c or x<c have infinitely many solutions; represent solutions of such inequalities on number line diagrams. Represent and analyze quantitative relationships between dependent and independent variables.

MGSE6.EE.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another. a. Write an equation to express one quantity, the dependent variable, in terms of the other quantity, the independent variable.

b. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation to represent the relationship between distance and time.

Essential questions Or "I Can" statements	Monday  How can I tell the difference between an expression, equation and an inequality?  How are the solutions of equations and inequalities different?	Tuesday I can solve and graph one-step inequalities with positive, rational numbers.	Wednesday I can solve and graph one-step inequalities with positive, rational numbers.	Thursday I can write, interpret, manipulate, and solve equations and inequalities.	Friday I can write, interpret, manipulate, and solve equations and inequalities.
Warm-up	#90	#91	#92	#93	#94
Opening	Welcome back! Review a couple equations, pass out graded tests for students that didn't get it back before the break.	Review homework	https://www.brainpop. com/math/algebra/gra phingandsolvinginequali ties/	Review homework	
Work Session	-intro inequalities with notes sheet, graph inequalities on the back	-rewriting and graphing -inequality chart	-solving inequalities -graphing handout, 14 problems but numbered funny	-cereal activity Students will solve and graph 4 inequalities on construction paper using cereal and yarn for their graph.	-4 question quiz! -cut & paste activity
Homework	Weekly sheet- week 19				NONE
Closing	https://www.brainpop.co m/math/algebra/inequali ties/			There will be a quiz tomorrow with 4 questions similar to today's activity!	No school Monday, Test next Thursday!
Assessment for understanding	Formative-calling on students	Formative-calling on students, walking around to check chart	Formative- review graphs aloud or on board, ask students to self-check paper	Formative-check activity	Formative-grade quiz for accuracy. Check cut & paste

Unit 4 plan: <a href="https://www.georgiastandards.org/Georgia-Standards/Frameworks/6th-Math-Unit-4.pdf">https://www.georgiastandards.org/Georgia-Standards/Frameworks/6th-Math-Unit-4.pdf</a>
Page 19 and 20 have a task that helps with writing equations.