## $6^{\text {th }}$ Grade Unit 5: Exploring Real-Life Phenomena through One-Step Equations \& Inequalities



## Overview:

In this fifth unit of sixth-grade math, students will explore one-step equations and inequalities as they build their problem-solving stamina. Students will demonstrate their ability to solve equivalent expressions and find possible solutions for inequalities with nonnegative numbers and solutions.

## Learning Targets:

In Unit 5, students will:

- Solve one-step equations and inequalities involving variables when values for the variables are given.
- Determine whether an equation and inequality involving a variable is true or false for a given value of the variable.
- Write one-step equations and inequalities to represent and solve problems.
- Explain that a variable can represent an unknown number or any number in a specified set.
- Solve problems by writing and solving equations of the form $x+p=q, p x=q$ and $x p=q$ for cases in which $p, q$ and $x$ are all nonnegative rational numbers.
- Recognize and generate inequalities of the form $x>c, x<\mathcal{c}, x \geq \mathcal{c}$, or $x \leq c$ to explain situations that have infinitely many solutions.
- Represent solutions of such inequalities on a number line.

Key Vocabulary: (linked to GA DOE Interactive Glossary)

| Addition Property of <br> Equality | Constant of <br> Proportionality | Dependent Variable | Direct Proportion <br> (Direct Variation) | Division Property <br> of Equality | Equation |
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## Supporting Resources:

http://ctlslearn.cobbkl2.org/
https://gavirtual.instructure.com/courses/34329
Undo Multiplication or Division
Create an Equation from a Word Problem

Undo Addition or Subtraction
Add and Subtract Equations
Multiply and Divide Equations

