



Solving Equations with Variables on Both Sides

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Math
Grades 9–12



Introduction

Balance it out! In this lesson, students will be working to solve problems that have variables on both sides. There are various levels of worksheets attached to this lesson.

Learning Objectives

([CCSS.MATH.CONTENT.HSA.REI.A.1](#)) WALT explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.

Materials Needed

- Centers (links all provided)
- Chromebooks/tablet/device

Procedure

1. Students will watch the [Khan Academy videos and complete the practice problems](#). This is a great lesson for virtual learning, as many schools are doing a virtual or hybrid model for the 2020-2021 school year.
2. Students will then work on different Math Centers. These centers vary in difficulty. You can use all or some of the centers to help students practice this skill. You can also use these activities to differentiate instruction and help your gifted and struggling learners.
 - [Linear Equations with Variables on Both Sides](#)
 - [Extra Practice: Variables on Both Sides](#)
 - [You can create your own worksheet here](#)
 - Variables on Both Sides: This worksheet is a bit more challenging as students must create the equation and then solve.
 - [Worksheet](#)
 - [Answer Key](#)

Evaluation

There is no rubric with this activity. Any of the centers can be utilized for classwork or quiz grades.