

G5 Playlist: Using Grouping Symbols

Aligns with *CCSS.MATH.CONTENT.5.OA.A.1*: Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.

Related Standards

- *CCSS.MATH.CONTENT.5.OA.A.2*: Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.
- *CCSS.MATH.CONTENT.6.EE.A.1*: Write and evaluate numerical expressions involving whole-number exponents.

PREVIEW



Objectives

In this module, you will learn and practice the following skills:

- Use parentheses, brackets, or braces in expressions.
- Follow the order of operations to evaluate expressions with grouping symbols.

Let's get started!

Key Terms

- An **expression** is a group of one or more mathematical terms, separated by addition and/or subtraction.
- The **order of operations** is a specific order in which operations should be performed to simplify an expression.
- **Grouping symbols** tell which operations to be done first.
- **Parentheses** are grouping symbols that look like half-circles, ().
- **Brackets** are grouping symbols that look like half-squares, [].
- **Braces** are grouping symbols that look like a face with a nose, { }.



Using Grouping Symbols

(5.OA.A.1)

To simplify **expressions** that contain more than one operation, follow the **order of operations**:

1. Parentheses
2. Exponents (6.EE.A.1)
3. Multiplication and Division
4. Addition and Subtraction

The first priority, **parentheses**, includes other **grouping symbols** such as **brackets** and **braces**. If an expression includes more than one set of grouping symbols, simplify the inner-most grouping symbol first and work outwards.

If your students...

Do not recognize how grouping symbols change the value of an expression:

WATCH: Interpret Parentheses as “Do This First”

<https://www.opened.com/video/interpret-parentheses-as-do-this-first/412222>

WATCH: Change the Value of an Expression by Moving Parentheses

<https://www.opened.com/video/change-the-value-of-an-expression-by-moving-parentheses/412221>

Simplify grouping symbols from left to right:

WATCH: Grouping Symbols – Parentheses, Brackets, and Braces

<https://www.opened.com/video/grouping-symbols-parentheses-brackets-and-braces/198364>

Do not follow the order of operations:

WATCH: Order of Operations

<https://www.opened.com/video/order-of-operations/365287>

