

G3 Playlist: Using Multiplication and Division to Solve Word Problems

Aligns with *CCSS.MATH.CONTENT.3.OA.A.3*: Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Related Standards

- *CCSS.MATH.CONTENT.3.OA.A.1*: Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7 .
- *CCSS.MATH.CONTENT.3.OA.A.2*: Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.
- *CCSS.MATH.CONTENT.3.OA.A.4*: Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = _ \div 3$, $6 \times 6 = ?$

PREVIEW



Objectives

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

- Use multiplication to solve word problems
- Use division to solve word problems

Let's get started!

Key Terms

- The four **operations** are addition, subtraction, multiplication, and division.
- When you **multiply**, or do **multiplication**, you add equal groups together a specific number of times.
- A **factor** is one number that is multiplied by another number to create a certain product.
- A **product** is the answer to a multiplication problem.
- When you **divide**, or do **division**, you take a whole amount of objects and divide them into smaller, equal groups.
- The **quotient** is the answer to a division problem.
- An **array** is a representation of a number using rows and columns.
- A **variable** is an unknown piece of an equation that can be represented with a letter, picture, or other symbol.



Using Multiplication and Division to Solve Word Problems

(3.OA.A.3)

The four **operations** are addition, subtraction, multiplication, and division. When you **multiply**, or do **multiplication**, you add equal groups together a specific number of times. A **factor** is one number that is multiplied by another number to create a certain product. A **product** is the answer to a multiplication problem. When you **divide**, or do **division**, you take a whole amount of objects and divide them into smaller, equal groups. The **quotient** is the answer to a division problem. An **array** is a representation of a number using rows and columns. A **variable** is an unknown piece of an equation that can be represented with a letter, picture, or other symbol.

If your students...

Struggle with multiplication:

WATCH: Multiplication as Groups of Objects

<https://www.khanacademy.org/math/cc-third-grade-math/cc-3rd-mult-div-topic/cc-3rd-mult/v/multiplication-as-groups-of-objects>

Struggle with division:

WATCH: The Idea of Division

<https://www.khanacademy.org/math/cc-third-grade-math/cc-3rd-mult-div-topic/cc-3rd-division/v/the-idea-of-division>

Struggle with variables:

WATCH: Unknowns with Multiplication and Division

<https://www.khanacademy.org/math/cc-third-grade-math/cc-3rd-mult-div-topic/cc-third-grade-applying-mult-div/v/unknowns-with-multiplication-and-division>

For extra practice with multiplication and division in word problems:

PLAY: Relate Division to Multiplication Word Problems

<https://www.khanacademy.org/math/cc-third-grade-math/cc-3rd-mult-div-topic/cc-third-grade-applying-mult-div/e/relate-division-to-multiplication-word-problems>

For extra practice with visualizing word problems:

PLAY: Thinking Blocks

http://www.thinkingblocks.com/thinkingblocks_md/tb_md_main.html

