

Grade 3 Properties of Multiplication Lesson 5: Associative Property of Multiplication

Rationale: Today's lesson teaches students to use the Associative property to solve a multiplication problem.

Objective: I can group my factors in different ways but my product will stay the same.

Vocabulary: associative property, multiplication, product

Materials: Dry erase boards, Copy of the Must Do worksheet

Lesson:

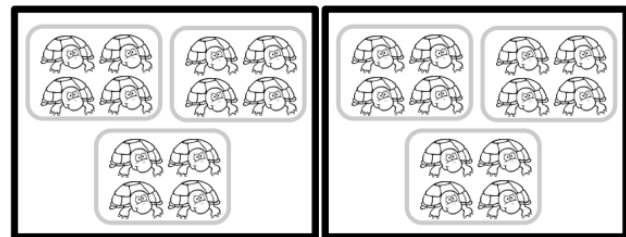
1. Have students refer to the Properties posters and recall the properties they have learned. Tell students, "Today we will learn about the final property of Multiplication. We will learn about the ASSOCIATIVE PROPERTY."
2. Project and explain, "In multiplication, it doesn't matter which order you multiply your factors. The product will always be the same."

$$(2 \times 3) \times 4 = 24$$



$$2 \text{ groups of } 3, 4 \text{ times} = 24$$

$$2 \times (3 \times 4) = 24$$



$$3 \text{ groups of } 4, 2 \text{ times} = 24$$

3. Discuss the turtle problem and why the Associative Property works.
4. Project and have students work in partners to solve together. Ensure they are adding parenthesis in two places. Model the first one, if necessary.

Directions: Group the factors two different ways by adding parentheses. Solve each problem.

$3 \times 4 \times 6 = \underline{\quad}$	$5 \times 2 \times 4 = \underline{\quad}$	$7 \times 3 \times 2 = \underline{\quad}$
$3 \times 4 \times 6 = \underline{\quad}$	$5 \times 2 \times 4 = \underline{\quad}$	$7 \times 3 \times 2 = \underline{\quad}$

5. Must Do