## Objective

By the end of this lesson, you will understand and be able to apply the distribution property in math.

## **Materials and Prep**

- Pencil and paper
- Calculator (optional)
- Basic understanding of addition, subtraction, and multiplication

## Activities

1. Activity 1: Distributive Property Practice

Write down a multiplication expression like 3 \* (4 + 2) on a piece of paper. Use the distribution property to simplify the expression step by step. Show your work and write down the final answer.

2. Activity 2: Real-Life Examples

Think of some real-life situations where the distribution property can be applied. For example, if you have 2 boxes with 5 apples each, you can use the distribution property to find the total number of apples. Write down at least three examples and solve them using the distribution property.

3. Activity 3: Create Your Own Problems

Create three math problems that involve the distribution property. Write them down and challenge yourself or a friend to solve them. Make sure to provide the solutions as well.

## **Talking Points**

- When we talk about the distribution property in math, we are referring to the idea that multiplying a number by a sum is the same as multiplying the number by each addend in the sum and then adding the products together. For example, 3 \* (4 + 2) is the same as 3 \* 4 + 3 \* 2. This property helps us simplify and solve mathematical expressions more easily.
- Let's practice the distribution property with some examples. Take the expression 2 \* (3 + 5). We can distribute the 2 to both the 3 and the 5 by multiplying: 2 \* 3 + 2 \* 5. This simplifies to 6 + 10, which equals 16. So, 2 \* (3 + 5) is equal to 16.
- Real-life examples can help us understand and apply the distribution property. For instance, imagine you have 4 friends, and each friend gives you \$10. Instead of adding 10 four times, we can use the distribution property to find the total amount. We multiply 4 by 10, which equals 40. So, if each friend gives you \$10, you will have a total of \$40.
- Creating your own problems is a great way to reinforce your understanding of the distribution property. Think of scenarios where you can apply this property and challenge yourself or a

friend to solve them. For example, you can create a problem like 2 \* (6 + 3) and solve it step by step using the distribution property.