Domain: Operations and Algebraic Thinking

### Grade: 1

# **Core Content**

Cluster Title: Work with addition and subtraction problems.

**Standard 7:** Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 - 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.

# **MASTERY Patterns of Reasoning:**

### Conceptual:

Students will understand the meaning of the equal sign.

Students will understand that equations can be true or false by using the equal sign.

#### **Procedural:**

Students can practice addition and subtraction equations on either side of the equal sign.

Students can determine if equations are true or false.

## Representational:

Students can model true and false equations.

# Supports for Teachers

# **Critical Background Knowledge**

### **Conceptual:**

Students will know how to solve addition and subtraction equations.

Students will know the meaning of "true" and "false."

### **Procedural:**

Students will be able to solve addition and subtraction equations.

# Representational:

Students can model addition and subtraction equations.

Code: 1.OA.7

Academic Vocabulary and Notation	
balanced equations, equals to, addition, subtraction, equation	
Instructional Strategies Used	Resources Used
Teachers may begin instruction by modeling a guided practice for the number equation. Continue the guided practice by using students to solve the number equations. Next, allow the students to practice and solve the number equations independently.  Use a physical scale, and use Unifix cubes and do a number equation on each side to find out if they are balanced or not. If they are balanced, they are true. If they are not, they are false.  10 + 2 9 + 3	Balancing: <a href="http://illuminations.nctm.org/LessonDetail.aspx?ID=L40">http://illuminations.nctm.org/LessonDetail.aspx?ID=L40</a> Pan Balance Numbers: <a href="http://illuminations.nctm.org/ActivityDetail.aspx?ID=33">http://illuminations.nctm.org/ActivityDetail.aspx?ID=33</a>
Assessment Tasks Used	
Skill-Based Task:	Problem Task:
Example 1: 5 + 2 = 3 + 4 7 = 7 True	Ramon says that 9 apples plus 4 apples is the same thing as 5 apples plus 8 apples. Is what Ramon said true? Write the equation then solve both sides.
Example 2: 11 + 5 = 12 + 3 16 ≠ 15 False	

Code: 1.OA.7