

Lesson 21: Solve Problems Using the Four Operations

Standards Alignments

Addressing 3.OA.D.8

Teacher-facing Learning Goals

- Represent two-step word problems using equations with a letter standing for the unknown quantity.
- Solve two-step word problems using the four operations.

Student-facing Learning Goals

- Let's represent and solve problems using all four operations.

Lesson Purpose

The purpose of this lesson is for students to represent and solve two-step word problems using the four operations.

Previously, students have represented and solved two-step word problems using addition, subtraction, multiplication, and division with smaller numbers. In this lesson, students continue to deepen their understanding of two-step word problems as they consider what they need to know to solve problems and think about the relationship between numbers in a problem. Students write equations with a letter standing for the unknown quantity to represent these problems.

This lesson has a Student Section Summary.

Access for:

Students with Disabilities

- Action and Expression (Activity 1)

English Learners

- MLR8 (Activity 2)

Instructional Routines

Notice and Wonder (Warm-up)

Lesson Timeline

Warm-up	10 min
Activity 1	20 min

Teacher Reflection Question

Check in with your norms and routines. Are they promoting engagement from all your students? Are there any adjustments you might make so

Activity 2	15 min
Lesson Synthesis	10 min
Cool-down	5 min

that all students do math tomorrow?

Cool-down (to be completed at the end of the lesson)

 5 min

Apples at the Farm Stand

Standards Alignments

Addressing 3.OA.D.8

Student-facing Task Statement

A booth at the apple orchard has 225 apples. 165 apples are not in baskets. The rest of the apples are in 6 baskets with the same number of apples in each basket. How many apples are in each basket?

1. Write an equation to represent this situation. Use a letter for the unknown quantity.
2. Solve the problem. Explain or show your reasoning.

Student Responses

1. $165 + (6 \times n) = 225$ or $225 - 165 = (6 \times n)$ or $(225 - 165) \div 6 = n$
2. 10 apples. Sample response: I subtracted 165 from 225 to find out how many apples were in baskets. It was 60 apples. I know that 6×10 is 60, so there would be 10 apples in each basket.