Eureka Math

4th Grade
Module 7
Lesson 7

At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

Directions for customizing presentations are available on the next slide.

Icons

Read, Draw, Write

Learning Target

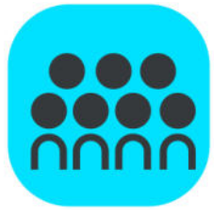
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

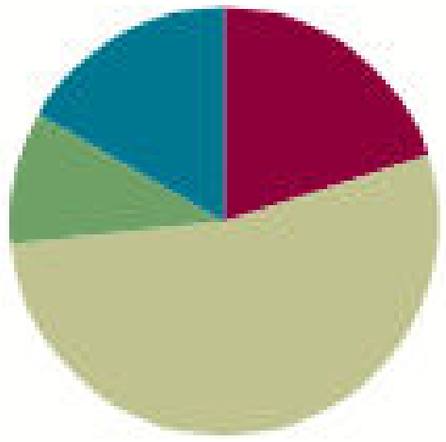
Small Group Time

Lesson 7

Objective: Solve problems involving mixed units of length.

Suggested Lesson Structure

Fluency Practice	(12 minutes)
Application Problem	(6 minutes)
Concept Development	(32 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can solve problems involving mixed units of length.

Add mixed numbers

3 fifths + 6 fifths=

Express 9 fifths as mixed units

4 thirds + 9 thirds =

Express 13 thirds as mixed units

Convert length units

1 yd=_____ft

1 yd 2 ft=_____ft

4 yd 1 ft=_____f

1 ft=_____in

4 ft 7 in=_____in

Application Problem

Samantha is making punch for a class picnic. There are 26 students in her class. Samantha uses 1 gallon 2 quarts of orange juice, 3 quarts of lemonade, and 1 gallon 3 quarts of sparkling water. How much punch did Samantha make? Will there be enough for each student to have two 1-cup servings of punch?

Add mixed units of length

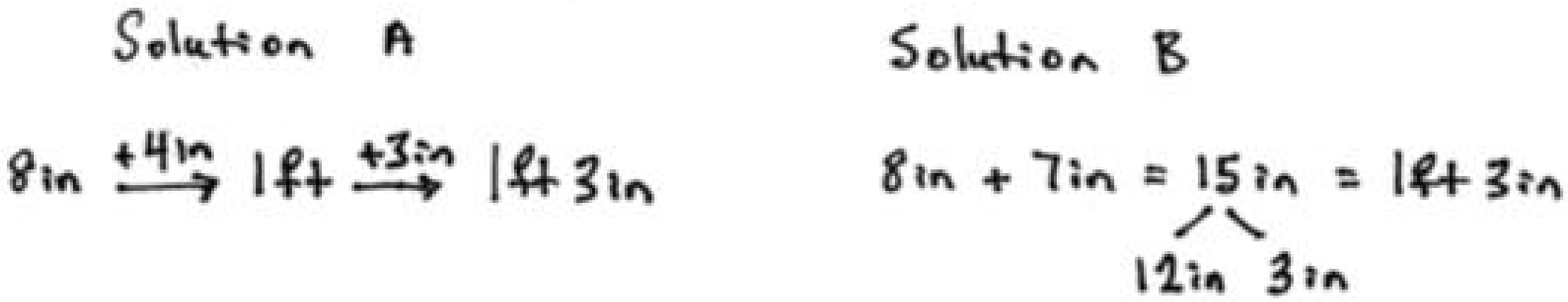
8 months + 7 months= _____ months

8 twelfths + 7 twelfths =_____ twelfths

8 inches + 7 inches=_____ inches

Add mixed units of length

Let's take a look at these two solutions that a student did to solve 8 inches + 7 inches.



How are these two methods the same? How are they different?

Add mixed units of length

Practice time!!

Group Problem: 11 inches + 9 inches

Partner Problem: 4 feet + 4 feet

Individual Problem: 7 inches + 14 inches

Add mixed units of length

Try using one of the methods we analyzed to solve
9 feet 8 inches +7 inches

Add mixed units of length

Practice time!!

Group Problem: 4 feet 9 inches + 10 inches

Partner Problem: 6 yards 2 feet + 5 feet

Individual Problem: 3 yards 2 feet + 2 yard 2 feet

Subtract mixed units of length

Analyze these two methods.

Problem 1

1 ft - 9 in = 12 in - 9 in = 3 in

Problem 2

7 ft - 9 in = 6 ft 3 in

6 ft 12 in

Add mixed units of capacity

Solve this problem with your group using one of the two strategies we just analyzed.

7 feet 4 inches - 5 feet 9 inches

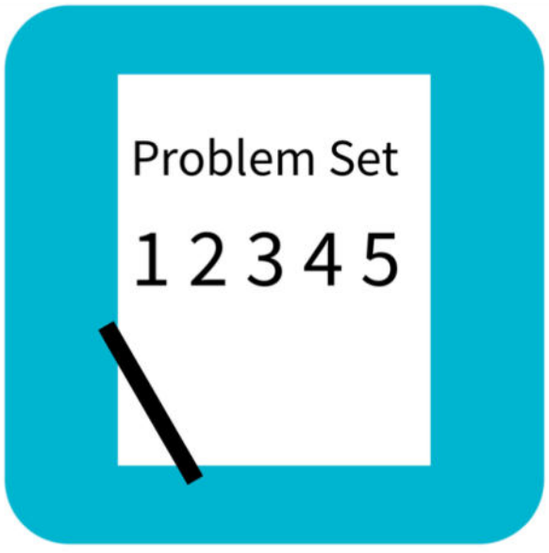
Subtract mixed units of capacity

Practice time!!

Group Problem: 7 yards 1 foot - 2 yards 2 feet

Partner Problem: 12 feet 1 in - 5 feet 2 in

Individual Problem: 6 months 3 weeks - 4 months 9 weeks



Problem Set

Name _____ Date _____

1. Determine the following sums and differences. Show your work.

   a. 1 ft + 2 ft = _____ yd

   b. 3 yd 1 ft + 2 ft = _____ yd

Debrief

- How does Problem 2(a) relate to Problem 2(b)?
- Problems 3, 4, and 5 all seem to be very different problems. Explain how Problem 3 relates to Problem 5(a) and Problem 4 to Problem 5(b).
- Discuss with your partner how the strategies used today compare to the strategies used yesterday.
- Explain which strategy you like using best and why.
- How is solving 7 feet 4 inches – 5 feet 9 inches similar to solving $7\frac{4}{12} - 5\frac{9}{12}$?

Exit Ticket

Name _____ Date _____

Determine the following sums and differences. Show your work.

1. 4 yd 1 ft + 2 ft _____ yd