

PROBLEM SOLVING
Lesson 7.10

Name _____

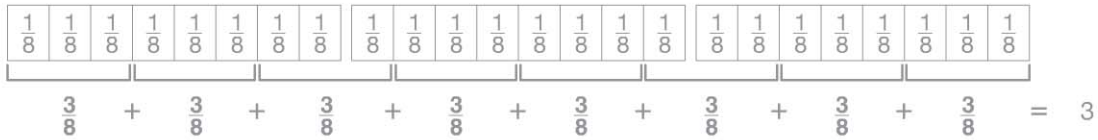
Problem Solving • Fractions

COMMON CORE STANDARD CC.4.NF.3d

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

Read each problem and solve.

- Each child in the Smith family was given an orange cut into 8 equal sections. Each child ate $\frac{5}{8}$ of the orange. After combining the leftover sections, Mrs. Smith noted that there were exactly 3 full oranges left. How many children are in the Smith family?



There are 8 addends, so there are 8 children in the Smith family.

8 children

- Val walks $2\frac{3}{5}$ miles each day. Bill runs 10 miles once every 4 days. In 4 days, who covers the greater distance?

- Chad buys peanuts in 2-pound bags. He repackages them into bags that hold $\frac{5}{6}$ pound of peanuts. How many 2-pound bags of peanuts should Chad buy so that he can fill the $\frac{5}{6}$ -pound bags without having any peanuts left over?

- A carpenter has several boards of equal length. He cuts $\frac{3}{5}$ of each board. After cutting the boards, the carpenter notices that he has enough pieces left over to make up the same length as 4 of the original boards. How many boards did the carpenter start with?

Lesson Check (CC.4.NF.3d)

- Karyn cuts a length of ribbon into 4 equal pieces, each $1\frac{1}{4}$ feet long. How long was the ribbon?
 - 4 feet
 - $4\frac{1}{4}$ feet
 - 5 feet
 - $5\frac{1}{4}$ feet
- Several friends each had $\frac{2}{5}$ of a bag of peanuts left over from the baseball game. They realized that they could have bought 2 fewer bags of peanuts between them. How many friends went to the game?
 - 6
 - 5
 - 4
 - 2

Spiral Review (CC.4.OA.5, CC.4.NF.1, CC.4.NF.3c, CC.4.NF.3d)

- A frog made three jumps. The first was $12\frac{5}{6}$ inches. The second jump was $8\frac{3}{6}$ inches. The third jump was $15\frac{1}{6}$ inches. What was the total distance the frog jumped? (Lesson 7.9)
 - $35\frac{3}{6}$ inches
 - $36\frac{1}{6}$ inches
 - $36\frac{3}{6}$ inches
 - $38\frac{1}{6}$ inches
- Greta made a design with squares. She colored 8 out of the 12 squares blue. What fraction of the squares did she color blue? (Lesson 6.3)
 - $\frac{1}{4}$
 - $\frac{1}{3}$
 - $\frac{2}{3}$
 - $\frac{3}{4}$
- LaDanian wants to write the fraction $\frac{4}{6}$ as a sum of unit fractions. Which expression should he write? (Lesson 7.2)
 - $\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$
 - $\frac{2}{6} + \frac{2}{6}$
 - $\frac{3}{6} + \frac{1}{6}$
 - $\frac{1}{6} + \frac{1}{6} + \frac{2}{6}$
- The teacher gave this pattern to the class: the first term is 5 and the rule is *add 4, subtract 1*. Each student says one number. The first student says 5. Victor is tenth in line. What number should Victor say? (Lesson 5.6)
 - 17
 - 19
 - 20
 - 21